Catalog

MWM-J _ (ii)

Supercedes:
MWM-J-2010

Wall Mounted Split Systems

Models:

MWM09J/JR	M5WM10J/JR
MWM15J/JR	M5WM15J/JR
MWM20J/JR	M5WM20J/JR
MWM25J/JR	M5WM25J/JR

McQuay® Air Conditioning

Engineered for flexibility and performance.™

Supercedes : MWM-J-2010

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Bulletin illustrations cover the general appearance of McQuay International products at the time of publication.
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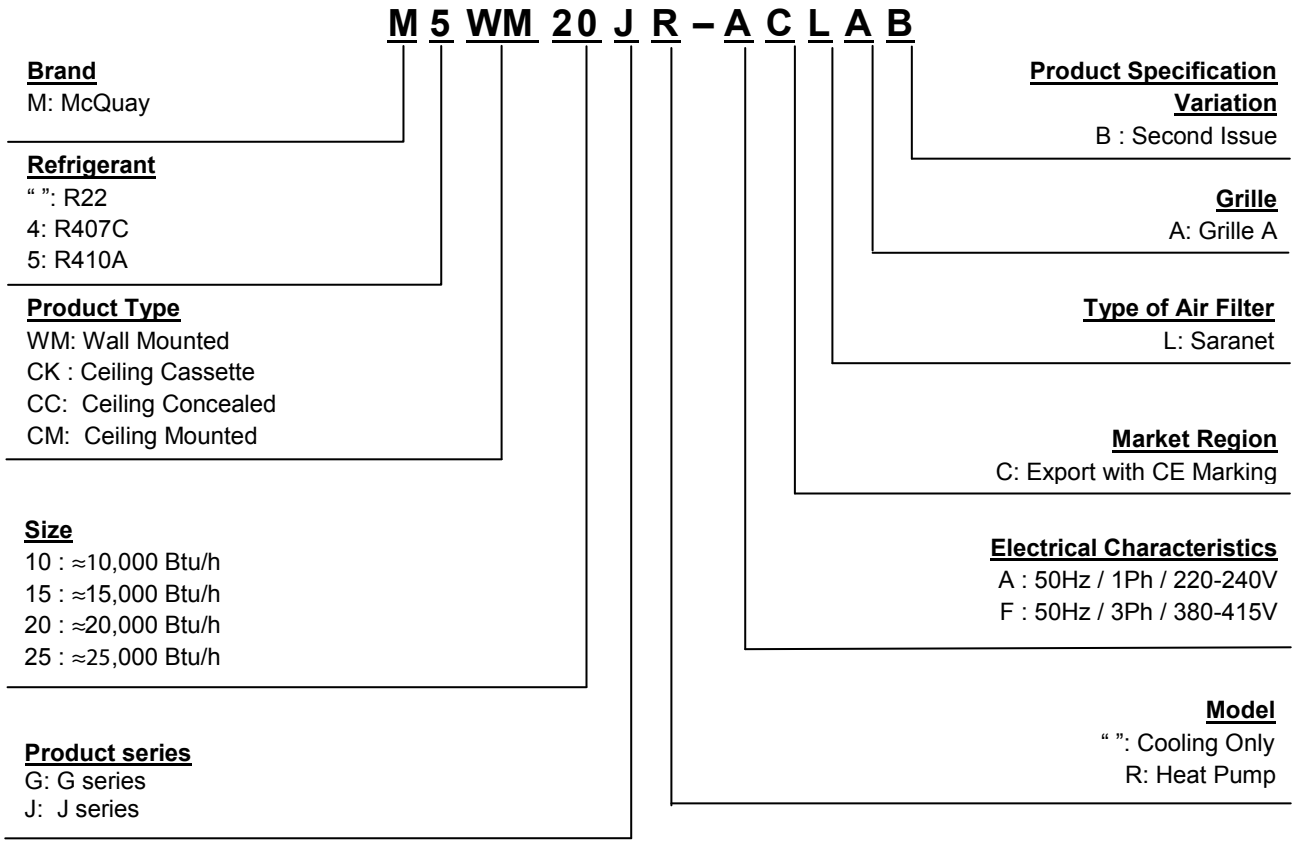
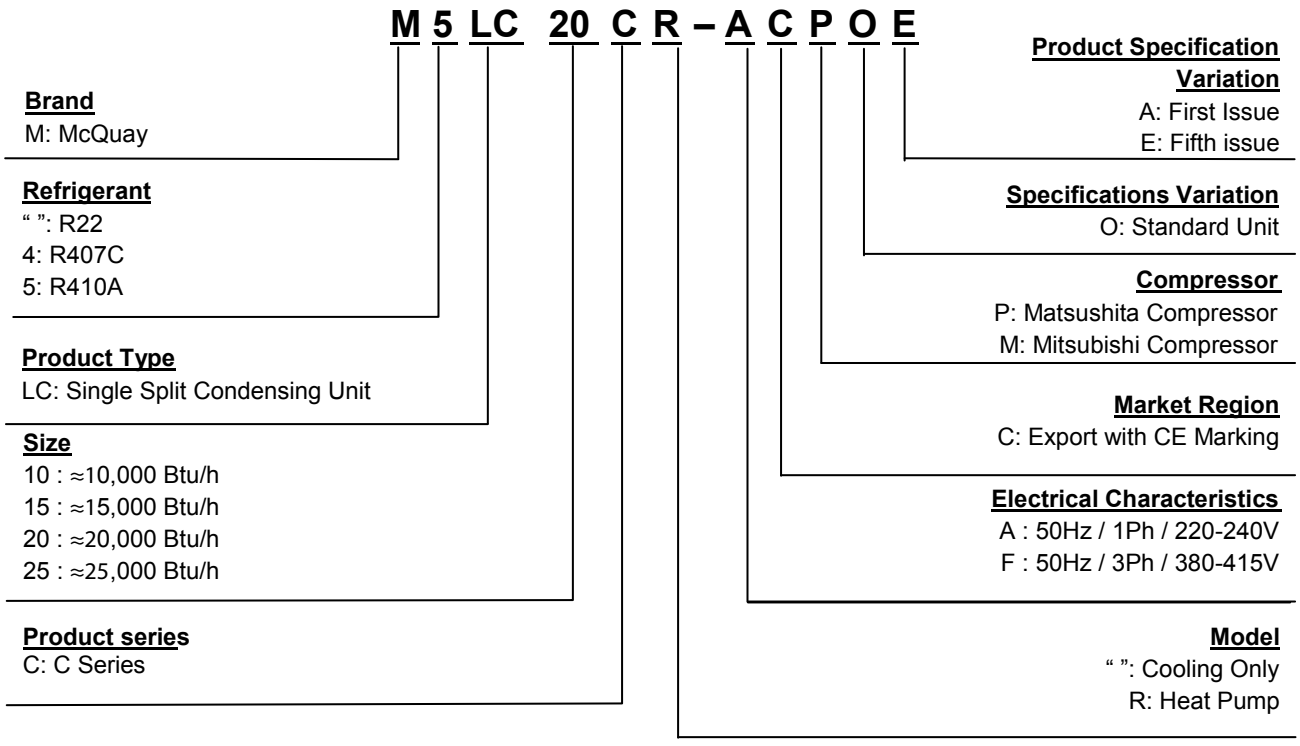
Nomenclature

Indoor



Outdoor



Product Line-Up

Indoor Unit
MWM-J

MWM		Nomenclature	Classification																	
			Handset		PCB		Air Purification						Marking		Grille		Others	
			G17		LGSN		Saranet Filter	Bio Filter					CE		A			
COOLING	09J	ACLAA	X		X		X						X		X			
	15J	ACLAA	X		X		X						X		X			
	20J	ACLAA	X		X		X						X		X			
	25J	ACLAA	X		X		X						X		X			
HEATPUMP	09JR	ACLAA	X		X		X						X		X			
	15JR	ACLAA	X		X		X						X		X			
	20JR	ACLAA	X		X		X						X		X			
	25JR	ACLAA	X		X		X						X		X			

Indoor Unit
M5WM-J

M5WM		Nomenclature	Classification																	
			PCB		Handset		Air Purification						Grille		Marking		Others	
			LGSN		G17		Saranet Filter	Bio Filter					A		CE			
COOLING ONLY																		
	10J	ACLAA	X		X		X						X		X			
	15J	ACLAA	X		X		X						X		X			
HEATPUMP																		
	10JR	ACLAA	X		X		X						X		X			
	15JR	ACLAA	X		X		X						X		X			

Outdoor Unit
MLC

MLC		Nomenclature	Classification																	
			PCB		Refrigerant Control		FIN			Safety Devices			Compressor		Marking		Others	
					Cap Tube	EXV	Gold Fin	Blue Fin	Aluminium Fin	Contactor	HP	LP	Rotary		CE		Drain Elbow	Low Ambient Kit
COOLING	09C	ACPOH			X				X				X		X			
	15 C	ACPOH			X				X				X		X			
	20C	ACPOD			X				X				X		X			
	25C	ACPOD			X				X				X		X			
HEATPUMP	09CR	ACPOH			X			X					X		X		X	
	15CR	ACPOJ			X			X					X		X		X	
	20CR	ACPOD			X			X					X		X		X	
	25CR	ACPOD			X			X					X		X		X	

Outdoor Unit
M5LC

M5LC		Nomenclature	Classification															
			PCB		Refrigerant Control		FIN			Safety Devices			Compressor		Marking		Others	
					Cap Tube	EXV	Gold Coated	Blue Coated	Bare	Contactor	HP	LP	Rotary		CE		Drain Elbow	Low Ambient Kit
COOLING ONLY																		
	10CJ	ACPGG			X				X				X		X			X
		ACPOG			X				X				X		X			
	15CJ	ACPGG			X				X				X		X			X
		ACPOG			X				X				X		X			
HEATPUMP																		
	10CRJ	ACPOG			X			X					X		X			
	15CRJ	ACPOG			X			X					X		X			

Indoor Unit

M5WM

M5WM		Nomenclature	Classification													
			PCB		Handset		Air Purification		Grille		Marking		Others	
			LGSN		GS01		Saranet Filter	Bio Filter + Titanium Apatite Filter	B		CE			
COOLING ONLY														
	20J	ACLAB	X		X		X		X		X			
	25J	ACLAB	X		X		X		X		X			
HEATPUMP														
	20JR	ACLAB	X		X		X		X		X			
	25JR	ACLAB	X		X		X		X		X			

Outdoor Unit

M5LC

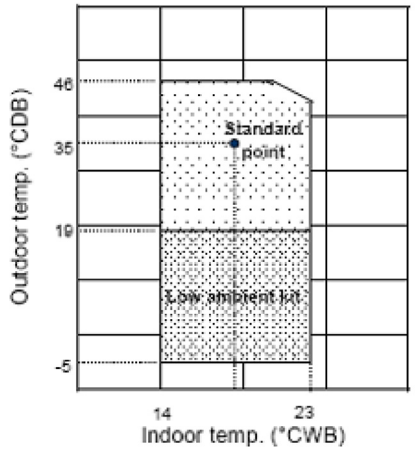
M5LC		Nomenclature	Classification															
			PCB		Refrigerant Control		FIN			Safety Devices			Compressor		Marking		Others	
					Cap Tube	EXV	Gold Coated	Blue Coated	Bare Fin	Contactor	HP	LP	Rotary		CE		Drain Elbow	Low Ambient Kit
COOLING ONLY																		
	20CJ	ACPOE			X		X		X				X		X			
	25CJ	ACPOE			X		X		X				X		X			
HEATPUMP																		
	20CRJ	ACPOE			X		X		X				X		X		X	
	25CRJ	ACPOE			X			X					X		X		X	

Application Information

Operating Range

Ensure the operating temperature is in allowable range.

Cooling only

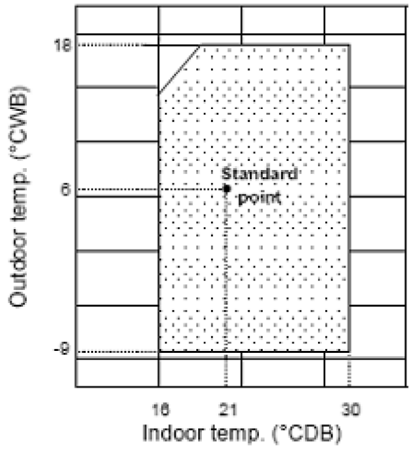


⚠ Caution :

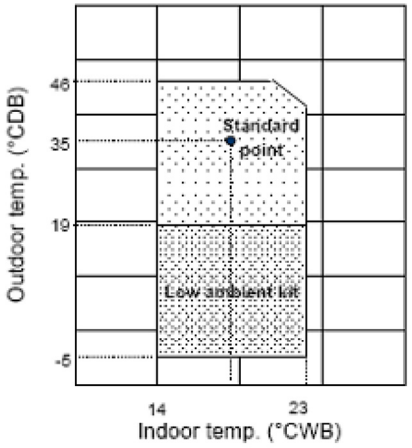
The use of your air conditioner outside the range of working temperature and humidity can result in serious failure.

Heatpump

Heating



Cooling



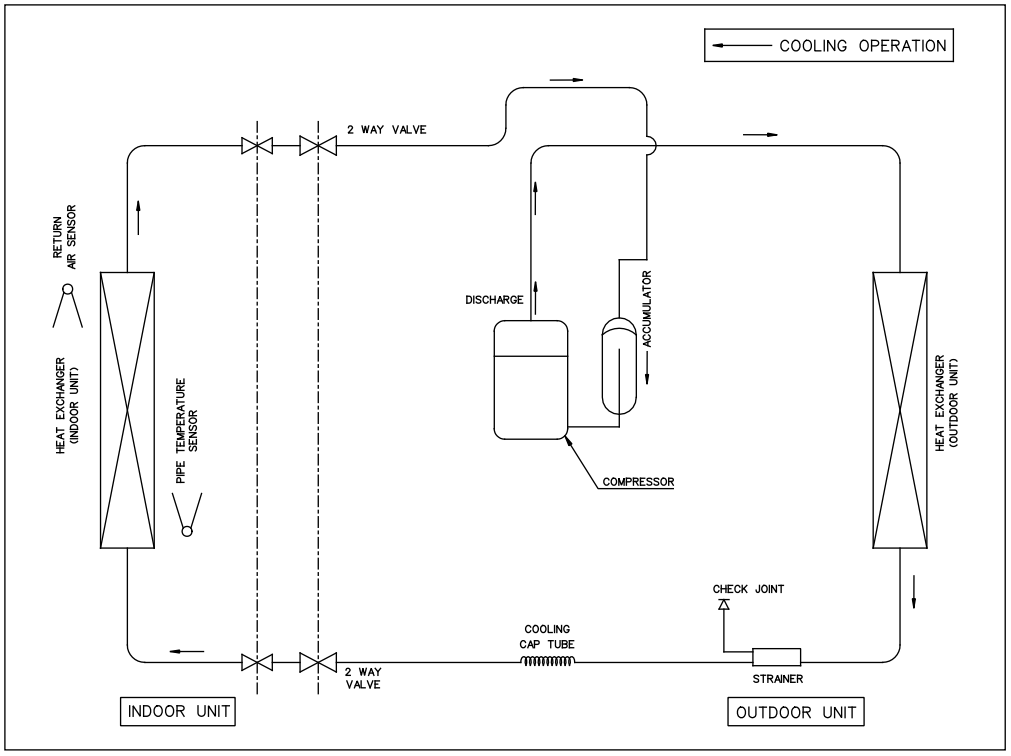
Note :

Standard operating range.

With Low ambient kit. (Optional item)
Please refer to local dealer for unit of this specification.

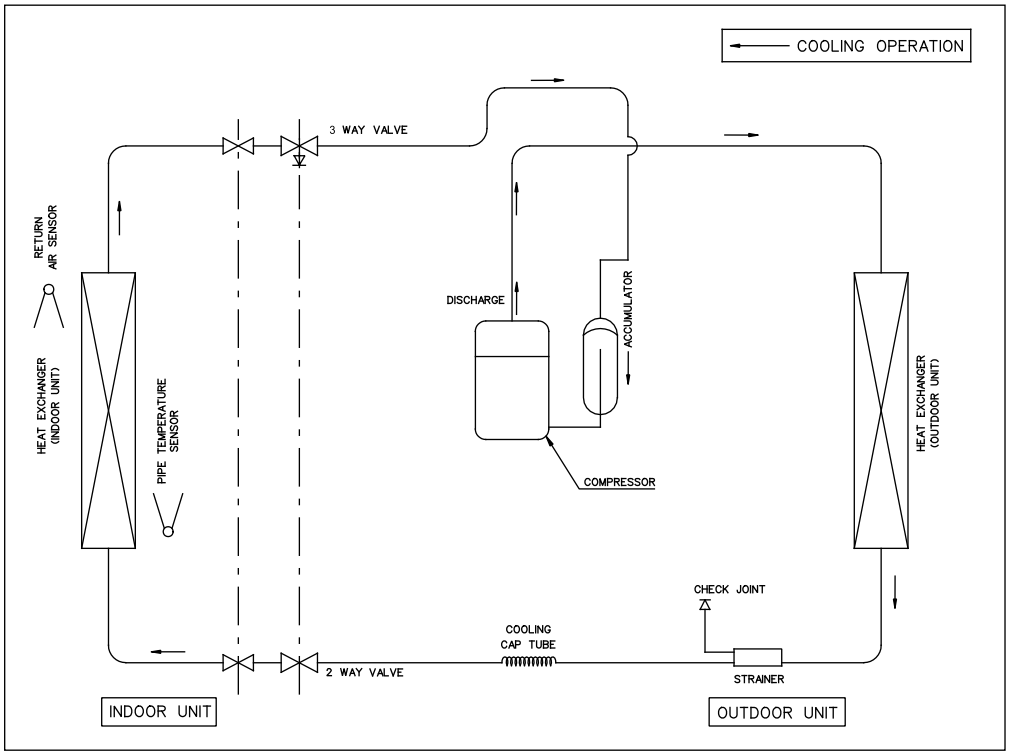
Refrigerant Circuit Diagram

Model: MWM09J - MLC09C **M5WM10J - M5LC10CJ**
MWM15J - MLC15C **M5WM15J - M5LC15CJ**

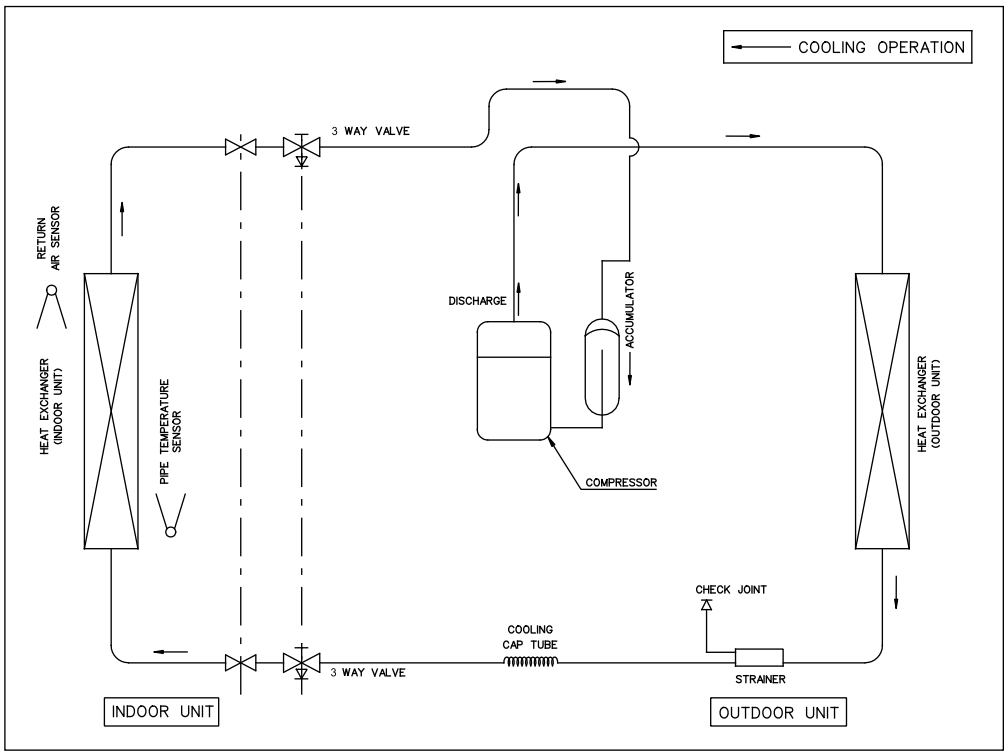


70034 049971

Model: MWM20J - MLC20C

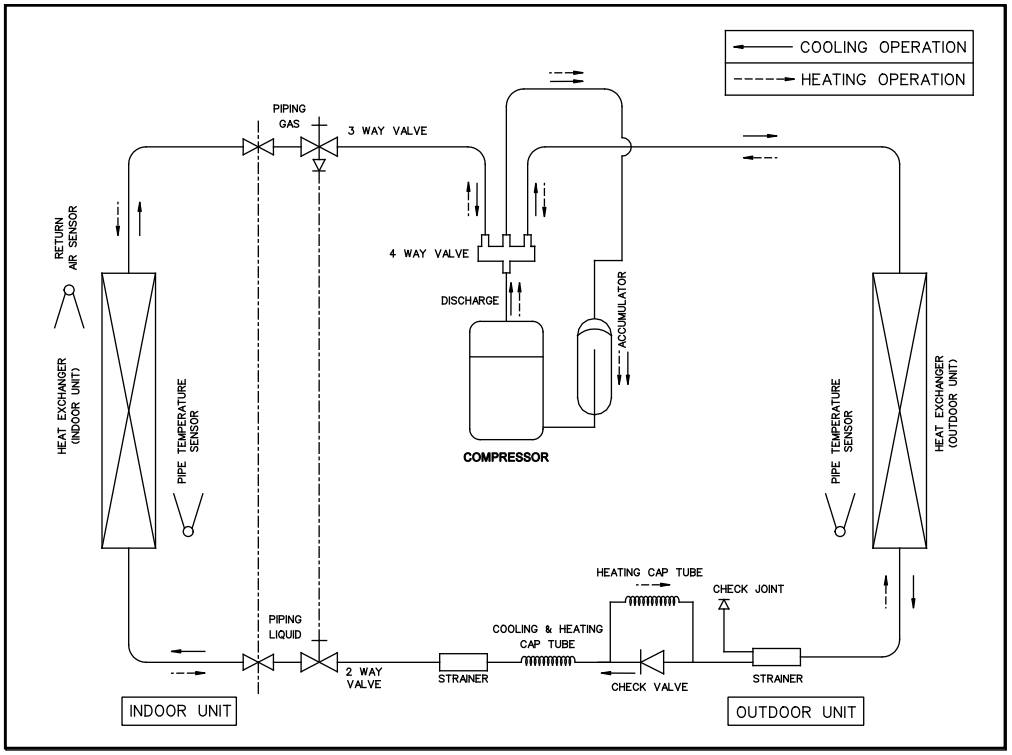


Model: MWM25J - MLC25C



Model: MWM09JR - MLC09CR

M5WM10JR - M5LC10CRJ
M5WM15JR - M5LC15CRJ



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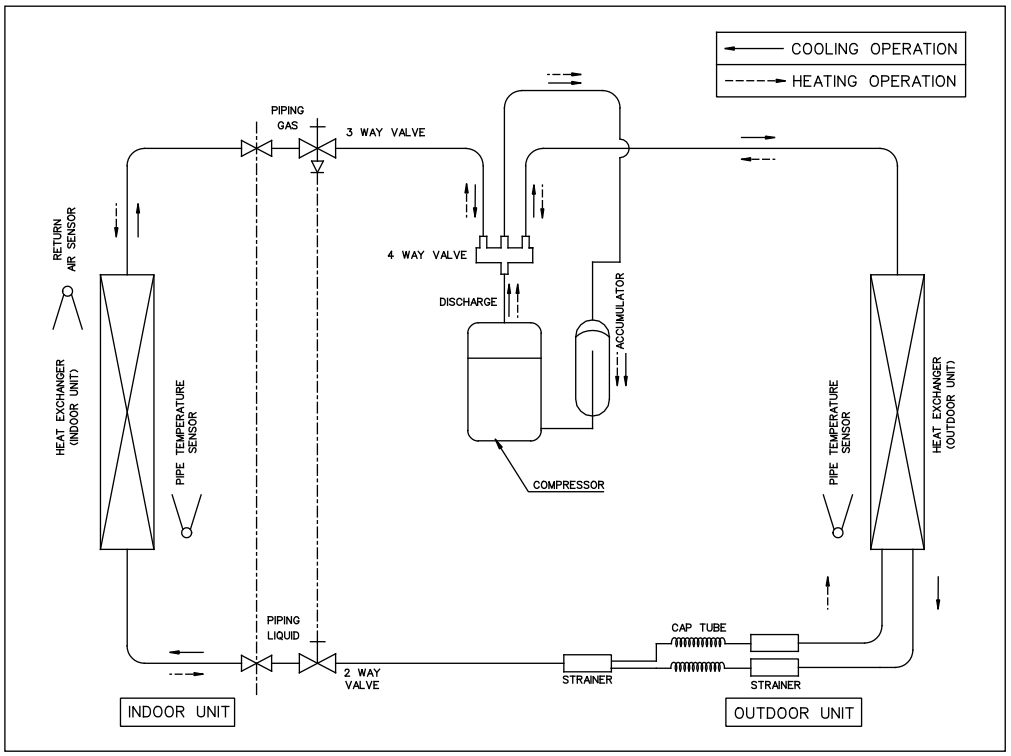
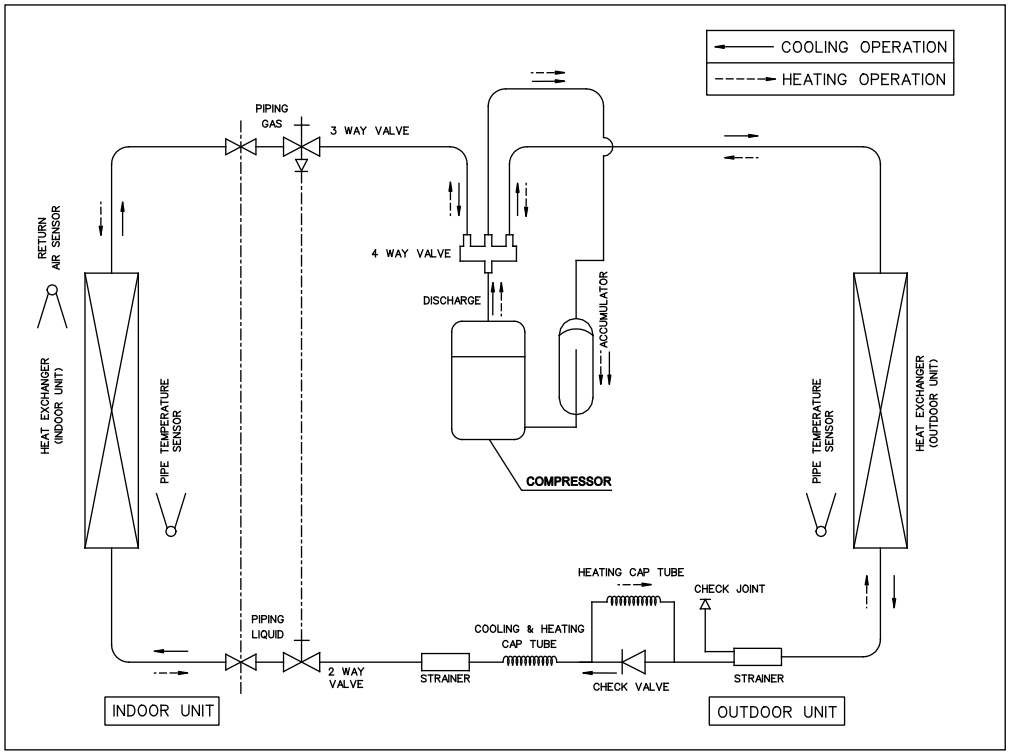
Model: MWM15JR - MLC15CR

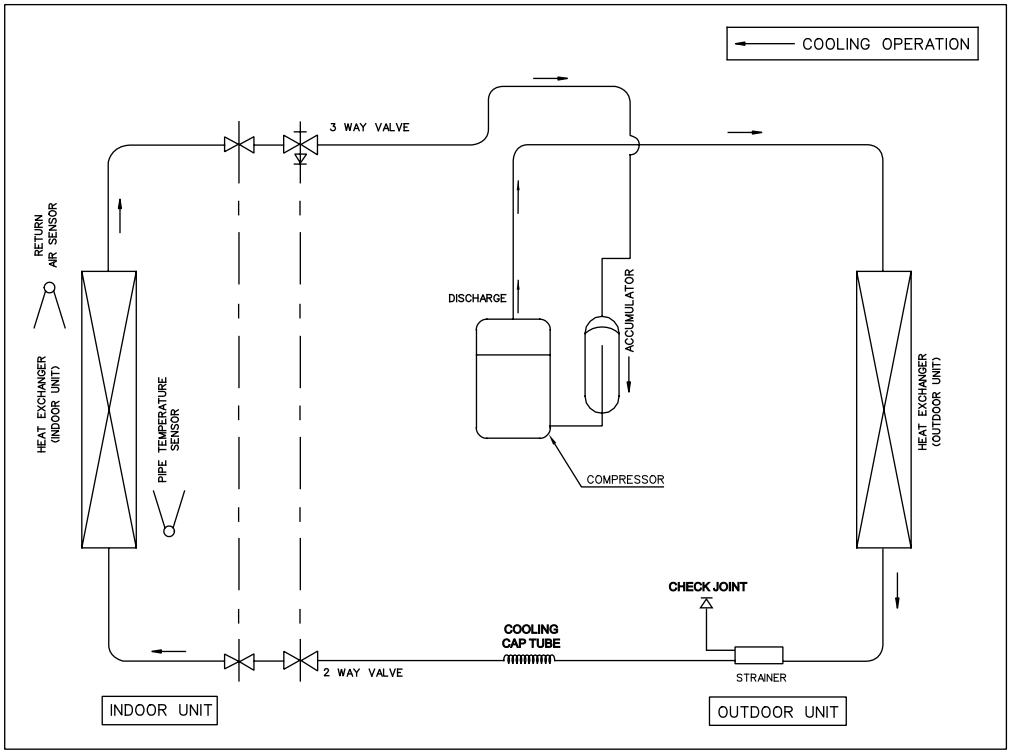


70034 095236

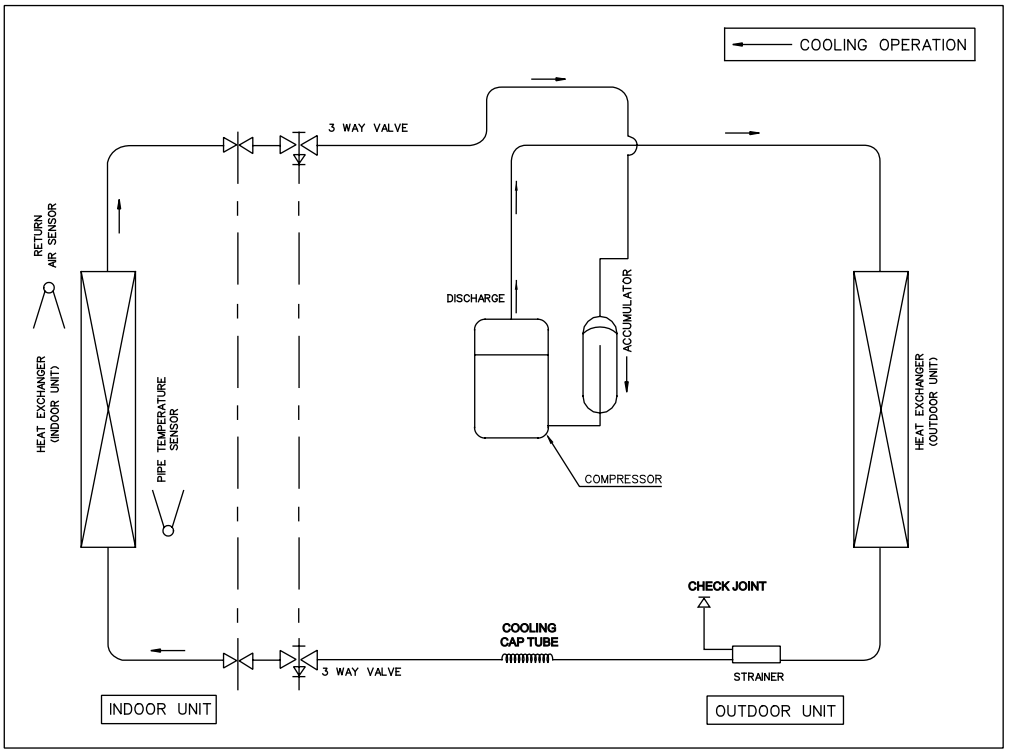
Model: MWM20JR - MLC20CR



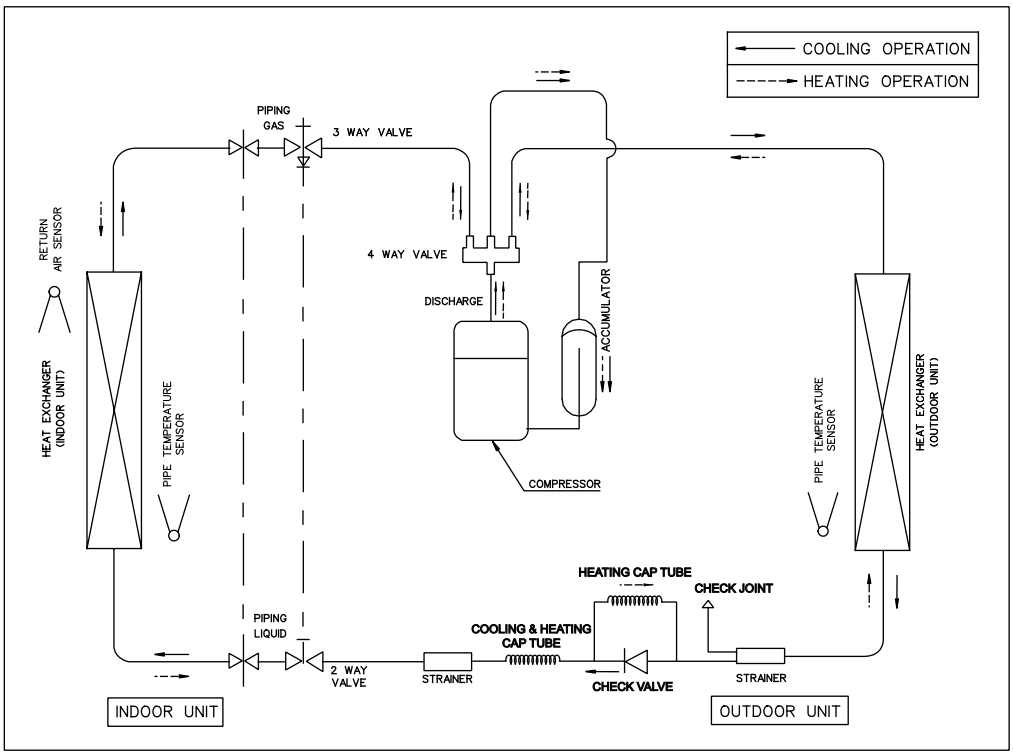
Model: M5WM20J – M5LC20CJ



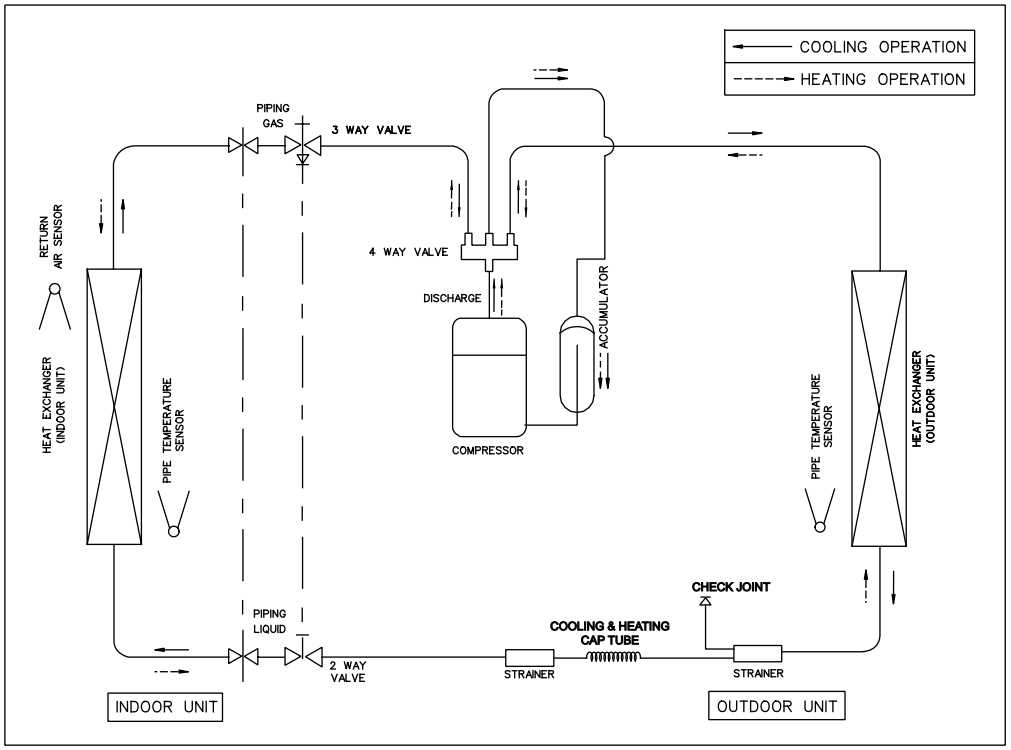
Model: M5WM25J – M5LC25CJ



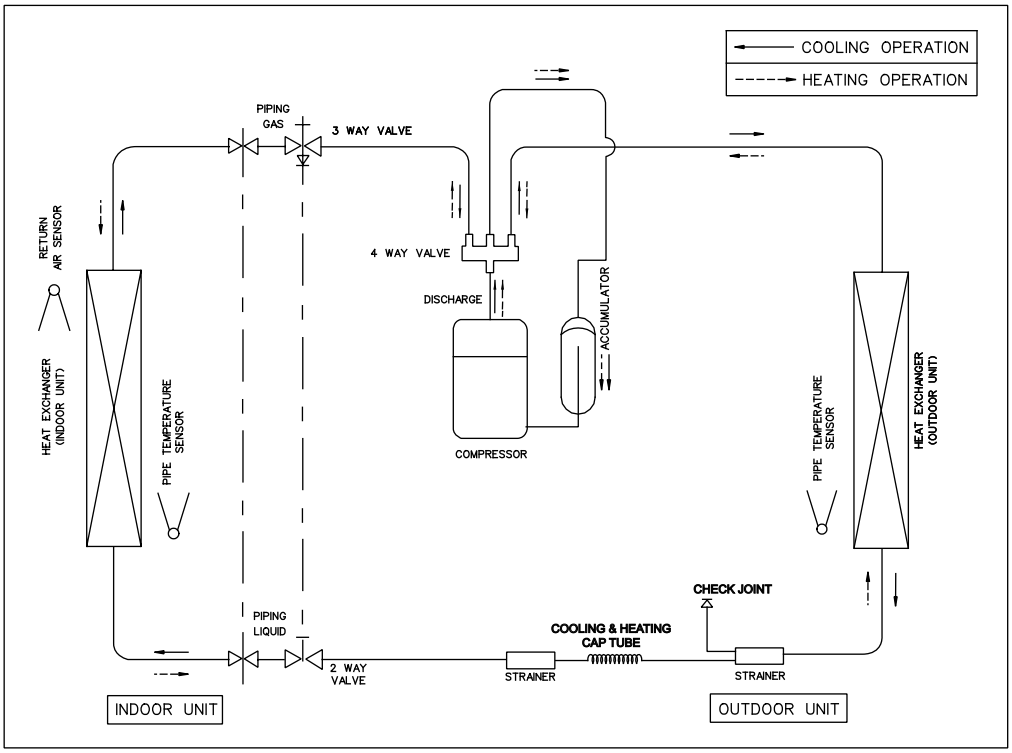
Model: M5WM20JR – M5LC20CRJ



Model: MWM25JR - MLC25CR



Model: M5WM25JR – M5LC25CRJ



Installation Guideline

Safety Precautions

⚠ WARNING

- Installation and maintenance should be performed by qualified persons who are familiar with local code and regulation, and experienced with this type of appliance.
- All field wiring must be installed in accordance with the national wiring regulation.
- Ensure that the rated voltage of the unit corresponds to that of the name plate before commencing wiring work according to the wiring diagram.
- The unit must be GROUNDED to prevent possible hazard due to insulation failure.
- All electrical wiring must not touch the refrigerant piping or any moving parts of the fan motors.
- Confirm that the unit has been switched OFF before installing or servicing the unit.
- Disconnect from the main power supply before servicing the air conditioner unit.
- DO NOT pull out the power cord when the power is ON. This may cause serious electrical shocks which may result in fire hazards.
- Keep the indoor and outdoor units, power cable and transmission wiring, at least 1m from TVs and radios, to prevent distorted pictures and static. {Depending on the type and source of the electrical waves, static may be heard even when more than 1m away}.

⚠ CAUTION

Please take note of the following important points when installing.

- **Do not install the unit where leakage of flammable gas may occur.**

  If gas leaks and accumulates around the unit, it may cause fire ignition.
- **Ensure that drainage piping is connected properly.**

  If the drainage piping is not connected properly, it may cause water leakage which will dampen the furniture.
- **Do not overcharge the unit.**

  This unit is factory pre-charged. Overcharge will cause over-current or damage to the compressor.
- **Ensure that the unit's panel is closed after service or installation.**

  Unsecured panels will cause the unit to operate noisily.
- **Sharp edges and coil surfaces are potential locations which may cause injury hazards. Avoid from being in contact with these places.**
- **Before turning off the power supply, set the remote controller's ON/OFF switch to the "OFF" position to prevent the nuisance tripping of the unit.** If this is not done, the unit's fans will start turning automatically when power resumes, posing a hazard to service personnel or the user.
- **Do not operate any heating apparatus too close to the air conditioner unit.** This may cause the plastic panel to melt or deform as a result of the excessive heat.
- **Ensure the color of wires of the outdoor unit and the terminal markings are same to the indoors respectively.**
- **IMPORTANT : DO NOT INSTALL OR USE THE**
- **AIR CONDITIONER UNIT IN A LAUNDRY ROOM.**
- **Do not use joined and twisted wires for incoming power supply.**

NOTICE

Disposal requirements

Your air conditioning product is marked with this symbol. This means that electrical and electronic products shall not be mixed with unsorted household waste.

Do not try to dismantle the system yourself: the dismantling of the air conditioning system, treatment of the refrigerant, of oil and of other parts must be done by a qualified installer in accordance with relevant local and national legislation. Air conditioners must be treated at a specialized treatment facility for re-use, recycling and recovery. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health. Please contact the installer or local authority for more information.

Batteries must be removed from the remote controller and disposed of separately in accordance with relevant local and national legislation.

⚠ Caution

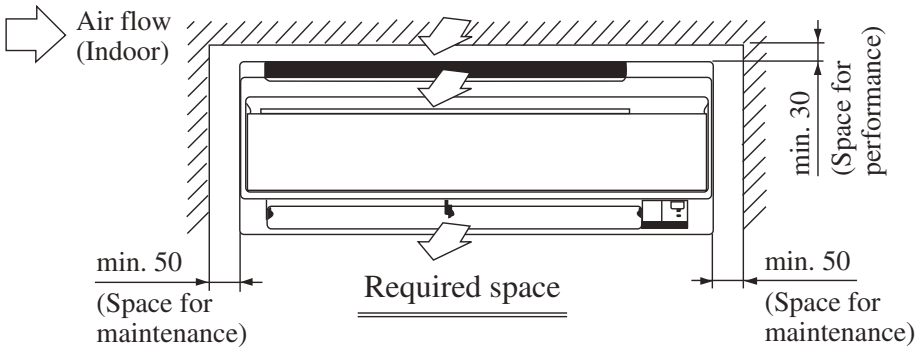
Before installing the unit, ensure that the power supply matches the power requirement of the air conditioner.

Installation of Indoor Unit

Service Space

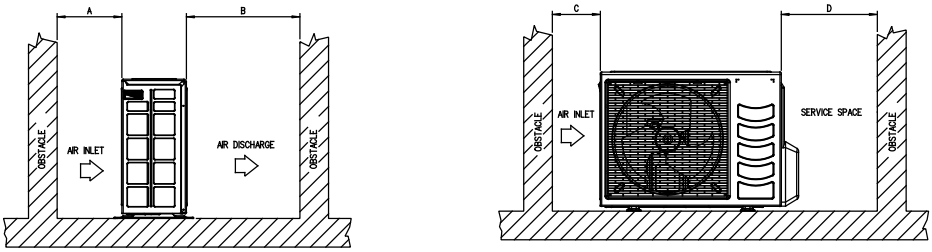
Install the indoor unit at a location with the following requirements

- Location is suitable for wiring, piping and drainage.
- No obstruction of air flow into and out of unit where cooler air can be evenly distributed.
- Ensure that air discharge is not short circuited with air intake.
- Ensure that wall is sufficiently strong, rigid, flat, perpendicular and vibration free.
- Where air filter cassette can be slided in or out easily.
- Where there is no danger of flammable gases.
- Where there is no direct sunlight on unit.



Installation Clearance

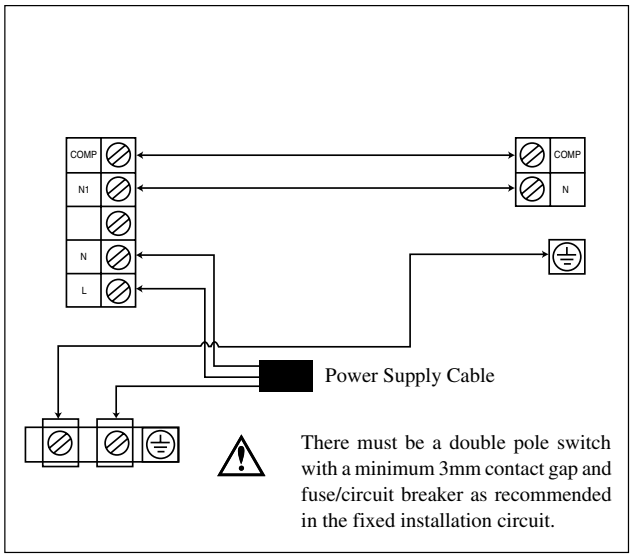
- Outdoor units must be installed such that there is no short circuit of the hot discharge air or obstruction to smooth air flow. Select the coolest possible place where intake air should not be hotter than the outside temperature (max. 45˚C).



ALL MODELS	A	B	C	D
Minimum Distance	300 mm	1000 mm	300 mm	500 mm

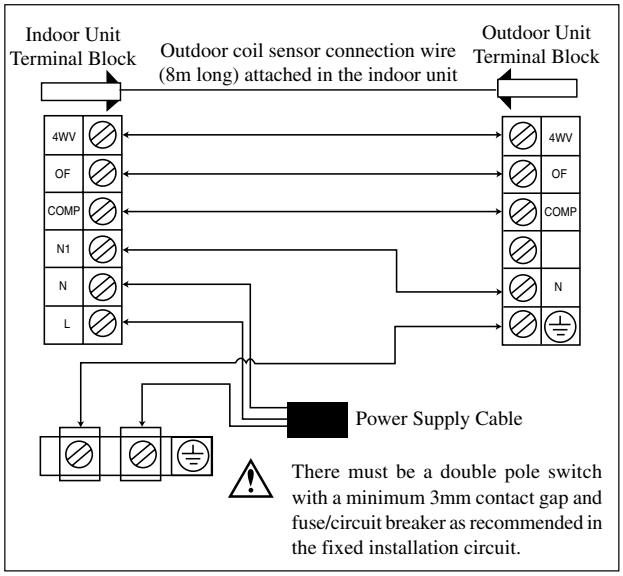
CAUTION : If the condensing unit is operated in an atmosphere containing oils (including machine oils), salt (coastal area), sulphide gas (near hot spring, oil refinery plant), such substances may lead to failure of the unit.

Cooling Unit (single phase)


COMP
N1
N
L
COMP
N
Power Supply Cable
There must be a double pole switch with a minimum 3mm contact gap and fuse/circuit breaker as recommended in the fixed installation circuit.

Model		M(5)WM09/10/15J M(5)LC09/10/15C	M(5)WM20/25J M(5)LC20/25C
Voltage range**		220V-240V/1Ph/50Hz + ⏚	
Power supply cable size*	mm²	1.5	2.5
Number of wire		3	3
Interconnection cable size*	mm²	1.5	2.5
Number of wire		3	3
Recommended fuse	A	15	20

Heat Pump Unit (single phase)



Model		M(5)WM09/10/15JR M(5)LC09/10/15CR	M(5)WM20/25JR M(5)LC20/25CR
Voltage range**		220V-240V/1Ph/50Hz + ⏚	
Power supply cable size*	mm²	1.5	2.5
Number of wire		3	3
Interconnection cable size*	mm²	1.5	2.5
Number of wire		3	3
Recommended fuse	A	15	20

Wiring

Electrical Connections

- Wiring regulations on wire diameters differ from country to country. Please refer to your LOCAL ELECTRICAL CODES for field wiring rules. Be sure that installations comply with the rules and regulations.

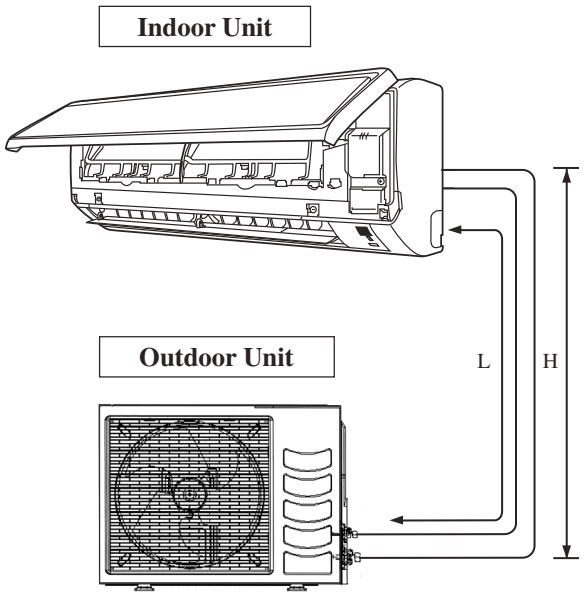
General Precautions

- Ensure that the rated voltage of the unit corresponds to the name plate before carrying out proper wiring according to the wiring diagram.
- Provide a power outlet to be used exclusively for each unit. A power supply disconnects and a circuit breaker for over-current protection should be provided in the exclusive line.
- The unit must be GROUNDED to prevent possible hazards due to insulation failures.
- All wiring must be firmly connected.
- All wiring must not touch the hot refrigerant piping, compressor or any moving parts of fan motors.

Refrigerant Piping

Piping Length and Elevation

When the pipe length becomes too long, both the capacity and reliability drop. As the number of bends increases, system piping resistance to the refrigerant flow increases, thus lowering the cooling capacity, and as the result the compressor may become defective. Always choose the shortest path and follow the recommendation as tabulated below:



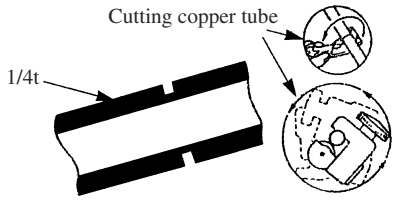
Model	Indoor	MWM09J/JR M5WM10J/JR	MWM15J/JR M5WM15J/JR	MWM20J/JR M5WM20J/JR	MWM25J/JR M5WM25J/JR
	Outdoor	MLC09C/CR M5LC10C/CR	MLC15C/CR M5LC15C/CR	MLC20C/CR M5LC20C/CR	MLC25C/CR M5LC25C/CR
Min. Allowable Length, m (L)		3	3	3	3
Max. Allowable Length, m (L)		12	12	15	15
Max. Allowable Height, m (H)		5	5	8	8
Liquid, mm/in		6.35 / 1/4	6.35 / 1/4	6.35 / 1/4	9.52 / 3/8
Suction, mm/in		9.52 / 3/8	12.70 / 1/2	15.87 / 5/8	15.87 / 5/8

* Be sure to add the proper amount of additional refrigerant. Failure to do so may result in reduced performance

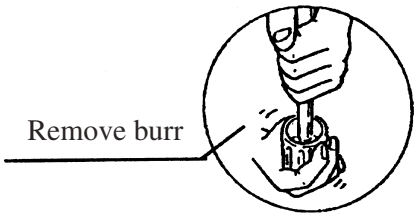
Remark: The refrigerant pre-charged in the outdoor unit is for piping length up to 7.6m/25ft.

Piping Works

- Do not use contaminated or damaged copper tubing. Do not remove plastic, rubber plugs and brass nuts from the valves, fittings, tubings and coils until you are ready to connect suction or liquid line into valves or fittings.
- If any brazing work is required, ensure that the nitrogen gas is passed through coil and joints while the brazing work is being done. This will eliminate soot formation on the inside walls of the copper tubings.
- Cut the connection pipe with a pipe cutter.

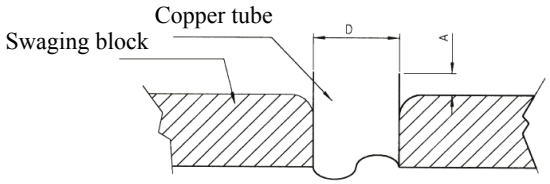


- Remove burrs from cut edges of the pipes with remover. Hold the end of the pipe downwards to prevent metal chips from entering the pipe.



- Insert the flare nuts, mounted on the connection parts of both the indoor unit and outdoor unit onto the copper pipes.
- Flare the pipe with extra length above the flaring tool as shown in the table.
- The flared edge must be even and not cracked or scratched.

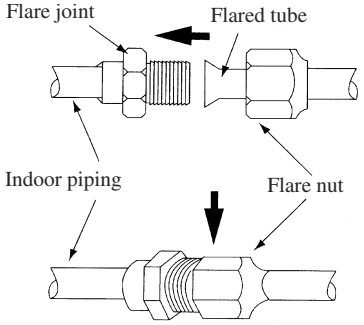
Ø Tube, D (mm / in)	A (mm)	
	Imperial Die	Rigid Die
6.35 / 1/4	1.3	0.7
9.52 / 3/8	1.6	1.0
12.70 / 1/2	1.9	1.3
15.88 / 5/8	2.2	1.7
19.05 / 3/4	2.5	2.0

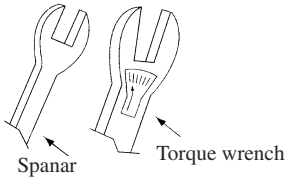


Piping Connection to the Units

- Align the center of the piping and tighten the flare nut sufficiently with fingers.
- Finally tighten the flare nut with torque wrench unit the wrench clicks.
- When tightening the flare nut with torque wrench, ensure the direction for tightening follows the arrow on the wrench.

Pipe Size (mm/in)	Torque (Nm)
6.35 (1/4)	18
9.52 (3/8)	42
12.70 (1/2)	55
15.88 (5/8)	65
19.05 (3/4)	78

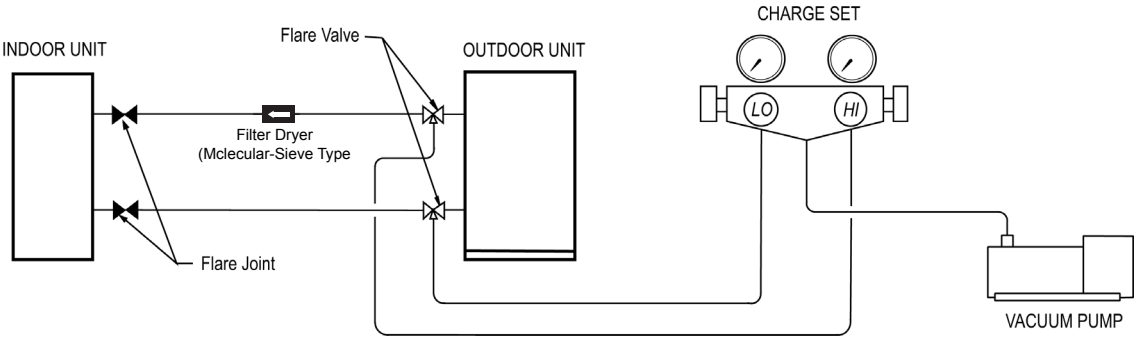




Vacuuming and Charging

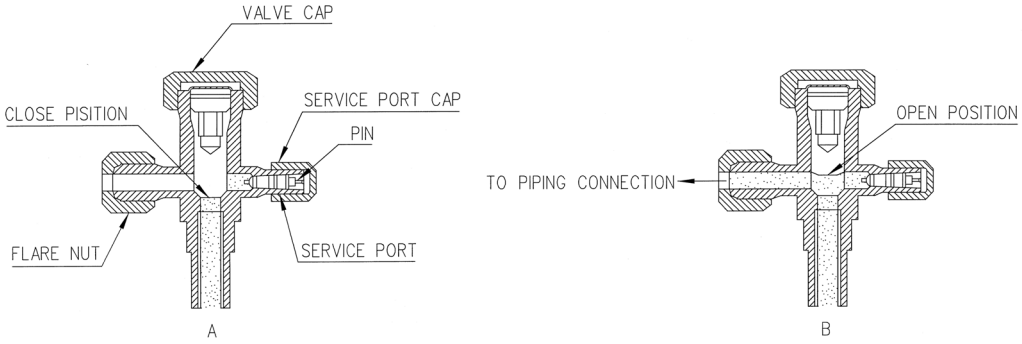
The pre-charged outdoor unit does not need any vacuuming or charging. However once it is connected, the connecting pipe line and the indoor unit need to be vacuumed before releasing the R22/R407C/R410A from the outdoor unit.

1. Open the service port core cap.
2. Connect pressure gauge to the service port.
3. Connect the line to vacuum pump. Open the charging manifold valve and turn the pump on. Vacuum to -0.1 MPa (-760mmHg) or lower. (Evacuation time varies by the pump but averagely in 1 hour).



Note : R22 - Nil
R410A - Nil

4. After evacuation, unscrew the spindle (diagram B) for the gas to run to indoor unit.



Additional Charge

- The refrigerant gas is charged in the outdoor unit and, if the piping length is 7.6m, additional charge of the refrigerant after vacuuming is not necessary.
- When the piping length is more than 7.6m, additional refrigerant charge (g) per additional 1m length as tabulated:

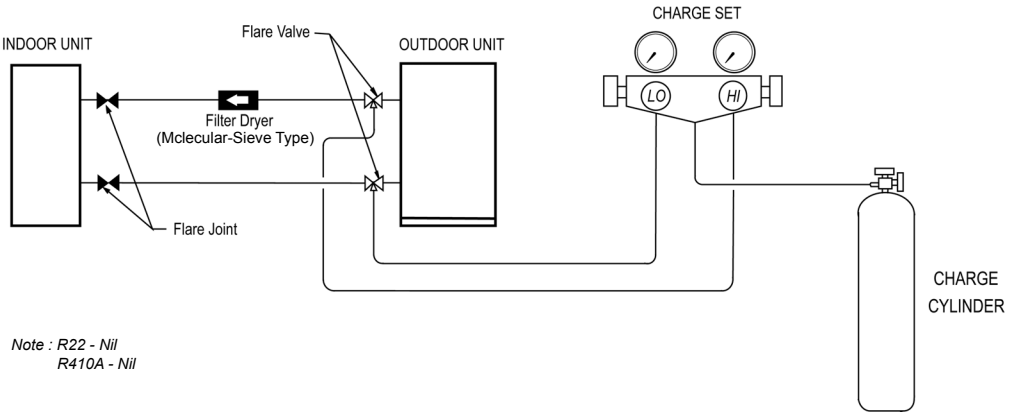
R22

Indoor	MWM09/15J	MWM09/15JR	MWM20J	MWM20JR	MWM25J	MWM25JR
Outdoor	MLC09/15C	MLC09/15CR	MLC20C	MLC20CR	MLC25C	MLC25CR
Additional Charge (g/m)	16	23	15	22	39	55

R410A

Indoor	M5WM10/15J	M5WM10/15JR	M5WM20/25J	M5WM20/25JR
Outdoor	M5LC10/15C	M5LC10/15CR	M5LC20/25C	M5LC20/25CR
Additional Charge [g/m]	9	16	11	16

Diagram shows typical charging method:



⚠ Caution

- For R410A, avoid prolong exposure of an opened compressor, or the internal part of refrigerant piping to moist air. The POE oil in the compressor and piping can absorb moisture from air.

Overall Checking

- Ensure the following, in particular:
  1. The unit is mounted solidly and rigid in position.
  2. Piping and connections are leak proof after charging.
  3. Proper wiring has been done.
- Drainage check – pour some water into drain pan.
- Test run
  1. Conduct a test run after water drainage test and gas leakage test.
  2. Watch out for the following:
     (a) Is the electric plug firmly inserted into the socket?
     (b) Is there any abnormal sound from the unit?
     (c) Is there any abnormal vibration with regard to the unit itself or piping?
     (d) Is there smooth drainage of water?
- Check that:
  1. Outdoor fan is running, with warm air blowing off the outdoor unit (cooling cycle).
  2. Indoor blower is running and discharge cool air (cooling cycle).
  3. Suction (low side) pressure is as per recommendations.
  4. The remote controller has incorporated a 3 minutes delay in the circuit. Thus, it requires about 3 minutes before the outdoor unit can start up.

Standard Operating Condition

Cooling only unit

Temperature	Ts °C / °F	Th °C / °F
Minimum indoor temperature	19.0 / 66.2	14.0 / 57.2
Maximum indoor temperature	32.0 / 89.6	23.0 / 73.4
Minimum outdoor temperature	19.4 / 66.9	-
Maximum outdoor temperature	46.0 / 114.8	-

Heat pump unit

Temperature	Ts °C / °F	Th °C / °F
Minimum indoor temperature	16.0 / 60.8	-
Maximum indoor temperature	30.0 / 86.0	-
Minimum outdoor temperature	-8.0 / 17.6	-9.0 / 15.8
Maximum outdoor temperature	24.0 / 75.2	18.0 / 64.4

Ts : Dry bulb temperature Th : Wet bulb temperature

Special Precautions When Dealing With Refrigerant R410A Unit

(1) What is new refrigerant R410A?
R410A is a new HFC refrigerant which does not damage the ozone layer. The working pressure of this new refrigerant is 1.6 times higher than conventional refrigerant (R22), thus proper installation / servicing is essential.

(2) Components
Mixture weight composition R32(50%) and R125(50%)

(3) Characteristic
- R410A liquid and vapor components have different compositions when the fluid evaporates or condenses. Hence, when leak occurs and only vapor leaks out, the composition of the refrigerant mixture left in the system will change and subsequently affect the system performance. DO NOT add new refrigerant to leaked system. It is recommended that the system should be evacuated thoroughly before recharging with R410A.
- When refrigerant R410A is used, the composition will differ depending on whether it is in gaseous or liquid phase. Hence when charging R410A, ensure that only liquid is being withdrawn from the cylinder or can. This is to make certain that only original composition of R410A is being charged into the system.
- POE oil is used as lubricant for R410A compressor, which is different from the mineral oil used for R22 compressor. Extra precaution must be taken not to expose the R410A system too long to moist air.

(4) Check list before installation / servicing
- Tubing
  Refrigerant R410A is more easily affected by dust of moisture compared with R22, make sure to temporarily cover the ends of the tubing prior to installation.
- Compressor oil
  No additional charge of compressor oil is permitted.
- Refrigerant
  No other refrigerant other that R410A
- Tools (size of service port is different from R22 system)
  Tools specifically for R410A only (must not be used for R22 or other refrigerant)
  i) Gauge manifold and charging hose
  ii) Gas leak detector
  iii) Refrigerant cylinder/charging cylinder
  iv) Vacuum pump c/w adapter
  v) Flare tools
  vi) Refrigerant recovery machine

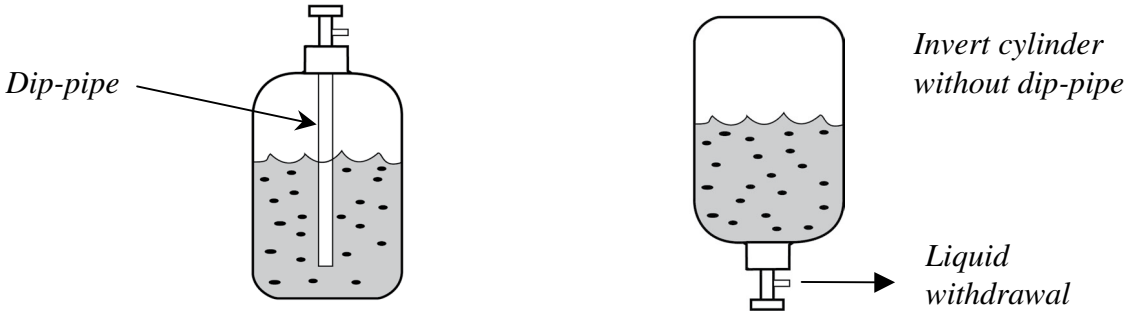
(5) Handling and installation guidelines
Like R22 system, the handling and installation of R410A system are closely similar. All precautionary measures; such as ensuring no moisture, no dirt or chips in the system, clean brazing using nitrogen, and thorough leak check and vacuuming are equally important requirements. However, due to its hydroscopic POE oil, additional precautions must be taken to ensure optimum and trouble free system operation.

(a) During installation or servicing, avoid prolong exposure of the internal part of the refrigerant system to moist air. Residual POE oil in the piping and components can absorb moisture from the air.

(b) Ensure that the compressor is not exposed to open air for more than the recommended time specified by its manufacturer (typically less than 10 minutes). Removed the seal plugs only when the compressor is about to be brazed.

(c) The system should be thoroughly vacuumed to 1.0 Pa (700mmHg) or lower. This vacuuming level is more stringent than R22 system so as to ensure no incompressible gas and moisture in the system.

(d) When charging R410A, ensure that only liquid is being withdrawn from the cylinder or can. This is to ensure that only the original composition of R410A is being delivered into the system. The liquid composition can be different from the vapor composition.



(e) Normally, the R410A cylinder or can is being equipped with a dip pipe for liquid withdrawal. However, if the dip pipe is not available, invert the cylinder or can so as to withdraw liquid from the valve at the bottom.

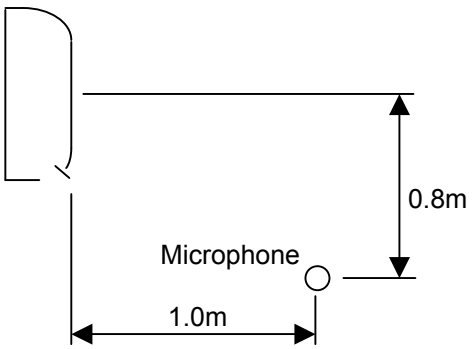
Sound Data

Sound Pressure Level

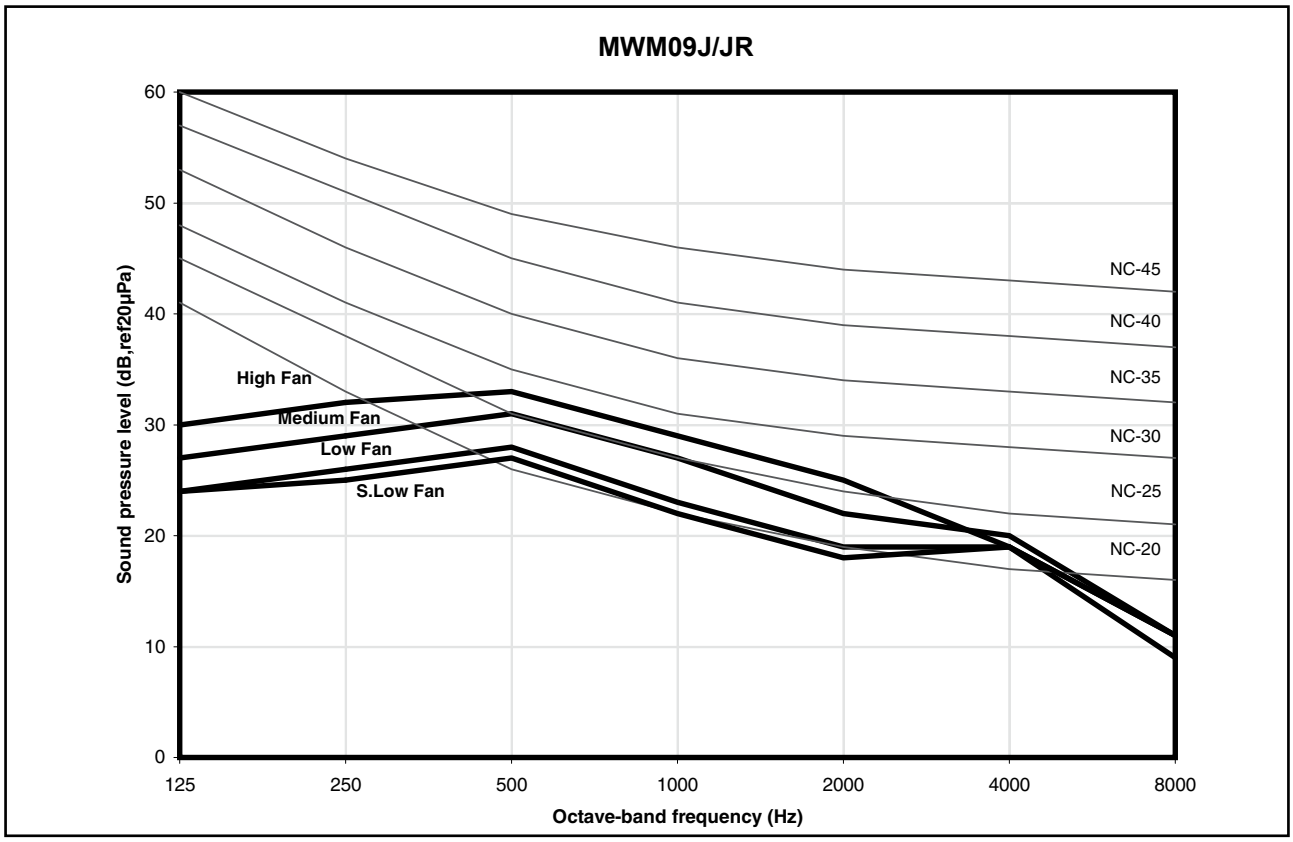
Model	Speed	1/1 Octave Sound Pressure Level (dB, ref 20μPa)							Overall (dBA)	Noise Criteria
	(RPM)	125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	8k Hz		
MWM09J/JR	High	30	32	33	29	25	19	9	34	28
	Medium	27	29	31	27	22	20	11	32	25
	Low	24	26	28	23	19	19	11	29	22
	S. Low	24	25	27	22	18	19	11	28	22
M5WM10J/JR	High	31	35	36	34	30	22	9	38	33
	Medium	26	30	31	27	22	13	5	32	25
	Low	24	26	27	22	15	7	7	27	21
	S. Low	23	24	25	20	13	6	5	25	-
MWM15J/JR M5WM15J/JR	High	32	35	36	34	31	22	11	38	33
	Medium	30	32	33	29	25	16	10	34	28
	Low	29	28	28	24	19	11	10	29	22
	S. Low	28	26	27	22	17	9	9	27	21
MWM20J/JR	High	21	31	36	38	36	27	15	42	37
	Medium	17	28	34	35	32	23	13	39	34
	Low	14	26	31	32	29	20	12	36	32
	S. Low	12	25	31	31	27	20	13	35	30
MWM25J/JR	High	40	42	42	42	39	32	20	46	43
	Medium	37	39	39	39	36	27	19	43	39
	Low	34	37	37	36	32	24	18	40	37
	S. Low	31	35	35	33	29	22	18	37	33
M5WM20J/JR	S. High	23	32	37	40	38	29	17	44	39
	High	21	31	36	38	36	27	15	42	37
	Medium	17	28	34	35	32	23	13	39	34
	Low	14	26	31	32	29	20	12	36	32
	S. Low	12	25	31	31	27	20	13	34	30
M5WM25J/JR	S. High	42	44	44	44	42	34	22	48	44
	High	40	42	42	42	39	32	20	46	43
	Medium	37	39	39	39	36	27	19	43	39
	Low	34	37	37	36	32	24	18	40	37
	S. Low	31	35	35	33	29	22	18	37	33

Part Number : 0163103C

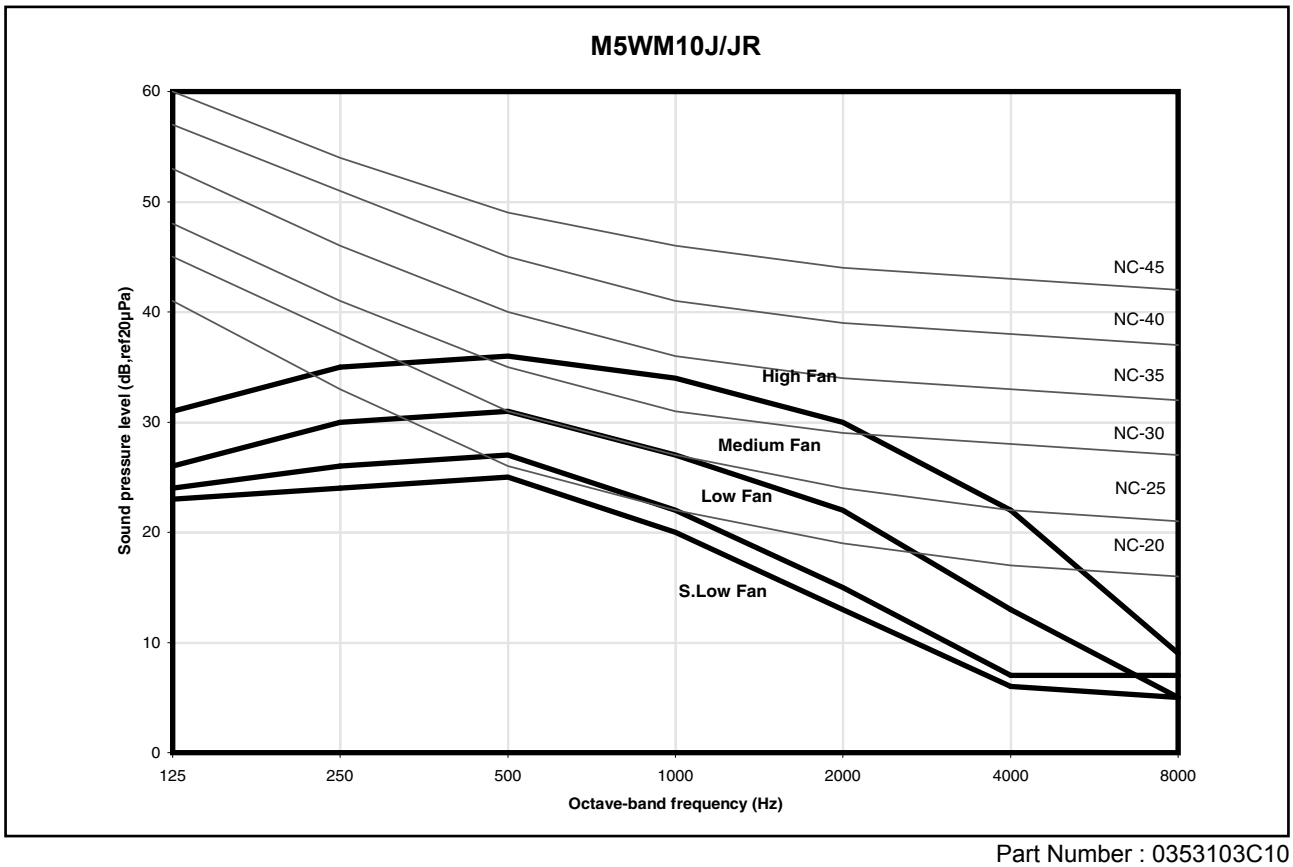
Microphone position: 1m in front and 0.8m below the vertical centre line of the unit. (JIS C 9612)

Model	Measuring location
MWM09J/JR **MWM15J/JR** **M5WM10J/JR** **M5WM15J/JR** **MWM20J/JR** **MWM25J/JR** **M5WM20J/JR** **M5WM25J/JR**	 Standard : JIS C 9612

NC Curve

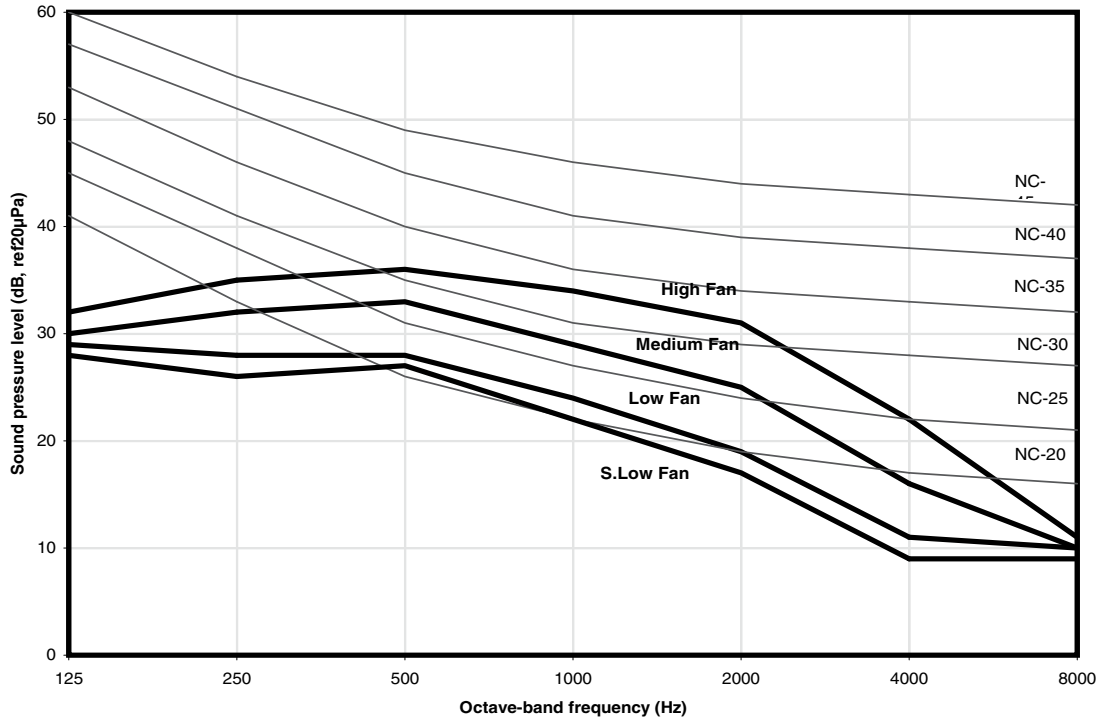


Part Number : 0313103C09



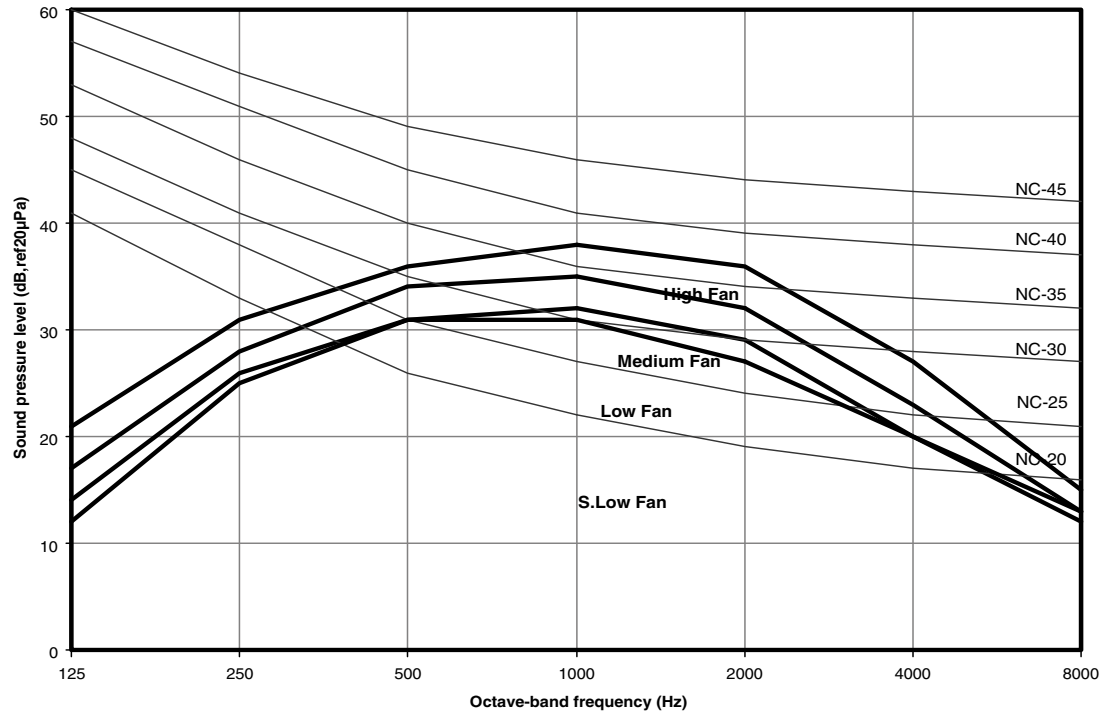
Part Number : 0353103C10

MWM15J/JR, M5WM15J/JR

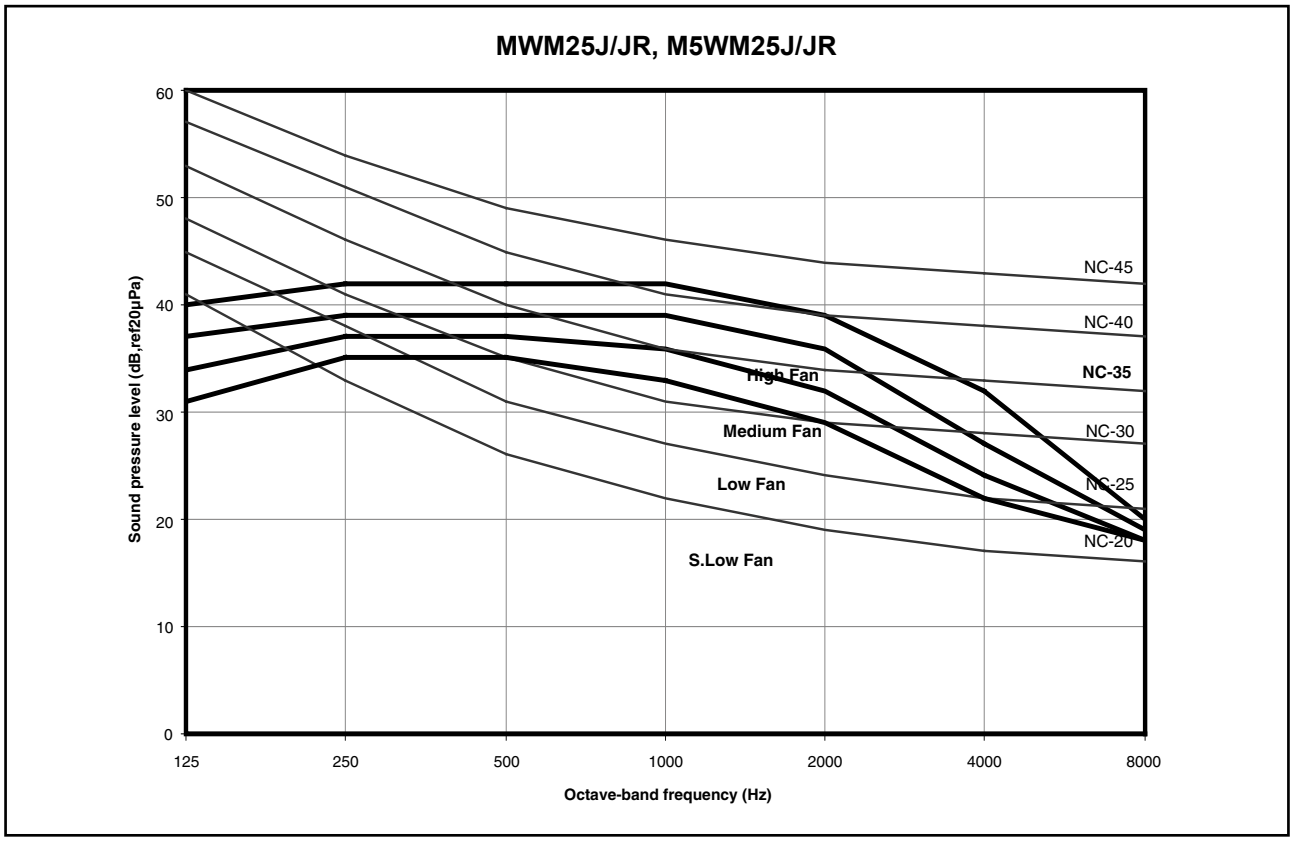


Part Number : 0363103C15

MWM20J/JR, M5WM20J/JR



Part Number : 0353103C20



Part Number : 0313103C25

Engineering & Physical Data

Engineering Data - R22 MODEL

MODEL	INDOOR UNIT			MWM09J	MWM15J	MWM20J	MWM25J
	OUTDOOR UNIT			MLC09C	MLC15C	MLC20C	MLC25C
NOMINAL COOLING CAPACITY			Btu/h	8400	12000	19500	24000
			W	2460	3520	5720	7030
NOMINAL TOTAL INPUT POWER (COOLING)			W	925	1176	1850	2530
NOMINAL RUNNING CURRENT (COOLING)			A	4.10	5.50	8.21	11.30
EER			W/W	2.66	2.99	3.09	2.78
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP.TUBE	OUTDOOR CAP.TUBE	OUTDOOR CAP.TUBE	OUTDOOR CAP.TUBE
REFRIGERANT CHARGE			kg	0.65	0.75	1.63	1.72
MODEL	INDOOR UNIT			MWM09JR	MWM15JR	MWM20JR	MWM25JR
	OUTDOOR UNIT			MLC09CR	MLC15CR	MLC20CR	MLC25CR
NOMINAL COOLING CAPACITY			Btu/h	8400	11800	19500	24000
			W	2460	3460	5720	7030
NOMINAL HEATING CAPACITY			Btu/h	9000	13000	19500	25000
			W	2640	3810	5720	7330
NOMINAL TOTAL INPUT POWER (COOLING)			W	925	11.76	1850	2530
NOMINAL TOTAL INPUT POWER (HEATING)			W	750	1064	1750	2465
NOMINAL RUNNING CURRENT (COOLING)			A	4.10	5.50	8.21	11.30
NOMINAL RUNNING CURRENT (HEATING)			A	3.40	4.96	7.73	11.01
EER			W/W	2.66	2.90	3.09	2.78
COP			W/W	3.52	3.58	3.27	2.97
REFRIGERANT CHARGE			kg	0.65	0.75	1.63	1.72
POWER SOURCE			V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
REFRIGERANT TYPE				R22	R22	R22	R22
INDOOR UNIT	CONTROL	AIR DISCHARGE		AUTO LOUVER(UP & DOWN) & GRILLE (LEFT & RIGHT)	AUTO LOUVER(UP & DOWN) & GRILLE (LEFT & RIGHT)	AUTO LOUVER(UP & DOWN) & GRILLE (LEFT & RIGHT)	AUTO LOUVER(UP & DOWN) & GRILLE (LEFT & RIGHT)
		OPERATION		LCD REMOTE CONTROL	LCD REMOTE CONTROL	LCD REMOTE CONTROL	LCD REMOTE CONTROL
	AIR FLOW	HIGH	l/s / CFM	145/ 309	168 / 355	253 / 536	290 / 614
		MEDIUM	l/s / CFM	125 /265	141 / 298	226 / 478	253 / 537
		LOW	l/s / CFM	105/ 223	114 / 242	200 / 424	236 / 474
	SOUND PRESSURE LEVEL (H/M/L)		dBA	34 / 32/ 29	38 / 34 / 29	42/ 39/ 36	46 / 43 / 40
	UNIT DIMENSION	HEIGHT X WIDTH X DEPTH	mm	288 X 800 X 204	288 x 800x 204	310 X1065 X 224	310 X1065 X 224
	PACKING DIMENSION	HEIGHT X WIDTH X DEPTH	mm	350 X 874 X 280	350 X 874 X 280	386 X 1136 X 314	386 X 1136 X 314
	UNIT WEIGHT		kg	12	12	14	14
	CONDENSATE DRAIN SIZE		mm	16	16	19.05	19.05
	FAN	TYPE		CROSS FLOW FAN	CROSS FLOW FAN	CROSS FLOW FAN	CROSS FLOW FAN
		DRIVE		DIRECT	DIRECT	DIRECT	DIRECT
	FAN MOTOR	TYPE		INDUCTION	INDUCTION	INDUCTION	INDUCTION
		INDEX OF PROTECTION (IP)		IP44	IP44	IP44	IP44
		INSULATION GRADE		CLASS E	CLASS E	CLASS E	CLASS E
		RATED INPUT POWER	W	37	40	56	72
		RATED RUNNING CURRENT	A	0.19	0.20	0.27	0.34
		MOTOR OUTPUT	W	18	18	26	30
		POLES		4	4	4	4
	COIL	TUBE	MATERIAL	SEAMLESS INNER GROOVE COPPER	SEAMLESS INNER GROOVE COPPER	SEAMLESS INNER GROOVE COPPER	SEAMLESS INNER GROOVE COPPER
			DIAMETER mm	7	7	7	7
		FIN	MATERIAL	ALUMINIUM (HYDROOHILIC FIN)	ALUMINIUM (HYDROOHILIC FIN)	ALUMINIUM (HYDROOHILIC FIN)	ALUMINIUM (HYDROOHILIC FIN)
			FACE AREA m^2	0.18	0.18	0.29	0.29
			ROW	2	2	2	2
	AIR QUALITY	FILTER	TYPE	SARANET	SARANET	SARANET	SARANET
			QUANTITY pc	2	2	2	2
	CASING		COLOUR	WHITE	WHITE	WHITE	WHITE
OUTDOOR UNIT	AIR FLOW		l/s / CFM	349/ 740	457/ 969	614/ 1300	755/ 1600
	SOUND PRESSURE LEVEL		dBA	45	49	51	52
	UNIT DIMENSION	HEIGHT X WIDTH X DEPTH	mm	475 X 600 X 245	540 x 700 x 250	654 X 855 X 328	756 X 855 X 328
	PACKING DIMENSION	HEIGHT X WIDTH X DEPTH	mm	535 X 712 X 320	620 x 810 x 330	710 X 990 X 415	810 X 990 X 415
	UNIT WEIGHT		kg	33	34	57	60
	PIPE CONNECTION	TYPE		FLARE VALVE	FLARE VALVE	FLARE VALVE	FLARE VALVE
		SIZE	LIQUID mm	6.40	6.40	6.40	9.52
			GAS mm	9.50	12.70	15.87	15.87
	FAN	TYPE		PROPELLER	PROPELLER	PROPELLER	PROPELLER
		DRIVE		DIRECT	DIRECT	DIRECT	DIRECT
	FAN MOTOR	TYPE		INDUCTION	INDUCTION	INDUCTION	INDUCTION
		INDEX OF PROTECTION (IP)		IP24	IP24	IP54	IP54
		INSULATION GRADE		CLASS B	CLASS B	CLASS B	CLASS B
		RATED INPUT POWER	W	45	59	120	124
		RATED RUNNING CURRENT	A	0.20	0.26	0.53	0.54
		MOTOR OUTPUT	W	18	24	64	75
		POLES		6	6	6	6
	COMPRESSOR	TYPE		ROTARY	ROTARY	ROTARY HERMETIC	ROTARY HERMETIC
		OIL TYPE		RB68A or FREOL ALPHA68M	RB68A or FREOL ALPHA68M	ATMOS NM56M or SUNISO 4GDID	ATMOS NM56M or SUNISO 4GDID
		OIL AMOUNT	cm^3	350	430	1000	700
		RATED INPUT POWER (COOLING)	W	843	1077	1674	2334
		RATED INPUT POWER (HEATING)	W	668	965	1574	2269
		RATED RUNNING CURRENT (COOLING)	A	3.70	5.00	7.41	10.41
		RATED RUNNING CURRENT (HEATING)	A	3.00	4.50	6.93	10.13
		LOCKED ROTOR AMP.	A	20	23	32	54
	COIL	TUBE	MATERIAL	SEAMLESS INNER GROOVE COPPER	SEAMLESS INNER GROOVE COPPER	SEAMLESS INNER GROOVE COPPER	SEAMLESS INNER GROOVE COPPER
			DIAMETER mm	7	7	7	7
		FIN	MATERIAL	ALUMINIUM (RAISE LANCE)	ALUMINIUM (RAISE LANCE)	ALUMINIUM (RAISE LANCE)	ALUMINIUM (RAISE LANCE)
			FACE AREA m^2	0.31	0.36	0.52	0.61
			ROW	1	1	2	2
	CASING		COLOUR	LIGHT GREY	LIGHT GREY	LIGHT GREY	LIGHT GREY
PART NUMBER				000413103C0909	000413103C1515	000413103C2020	000413103C2525

1) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151 (NON-DUCTED UNIT) OR ISO 13253 (DUCTED UNIT).
2) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

COOLING	HEATING
INDOOR: 27°C DB / 19°C WB	INDOOR: 20°C DB
OUTDOOR: 35°C DB / 24°C WB	OUTDOOR: 8°C DB / 6°C WB

Engineering Data - R410A MODEL

MODEL	INDOOR UNIT			M5WM10J	M5WM15J	M5WM20J	M5WM25J
	OUTDOOR UNIT			M5LC10C	M5LC15C	M5LC20CJ	M5LC25CJ
NOMINAL COOLING CAPACITY			Btu/h	9040	10750	17900	20500
			W	2650	3150	5250	6010
NOMINAL TOTAL INPUT POWER (COOLING)			W	825	1094	1635	1870
NOMINAL RUNNING CURRENT (COOLING)			A	3.70	5.10	7.19	8.26
EER			W/W	3.21	2.88	3.21	3.21
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP.TUBE	OUTDOOR CAP.TUBE	OUTDOOR	OUTDOOR
REFRIGERANT CHARGE			kg	0.80	0.89	1.45	1.55
MODEL	INDOOR UNIT			M5WM10JR	M5WM15JR	M5WM20JR	M5WM25JR
	OUTDOOR UNIT			M5LC10CR	M5LC15CR	M5LC20CRJ	M5LC25CRJ
NOMINAL COOLING CAPACITY			Btu/h	9040	10750	17900	20500
			W	2650	3150	5250	6010
NOMINAL HEATING CAPACITY			Btu/h	9550	11530	18000	21000
			W	2800	3380	5280	6150
NOMINAL TOTAL INPUT POWER (COOLING)			W	825	1094	1635	1870
NOMINAL TOTAL INPUT POWER (HEATING)			W	775	988	1490	1800
NOMINAL RUNNING CURRENT (COOLING)			A	3.70	5.10	7.19	8.26
NOMINAL RUNNING CURRENT (HEATING)			A	3.20	4.70	6.53	7.99
EER			W/W	3.21	2.88	3.21	3.21
COP			W/W	3.61	3.42	3.54	3.42
REFRIGERANT CHARGE			kg	0.80	0.89	1.45	1.55
POWER SOURCE			V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
REFRIGERANT TYPE				R410A	R410A	R410A	R410A
INDOOR UNIT	CONTROL	AIR DISCHARGE		AUTO LOUVER(UP & DOWN) & GRILLE (LEFT & RIGHT)	AUTO LOUVER(UP & DOWN) & GRILLE (LEFT & RIGHT)	NON-DUCTED	NON-DUCTED
		OPERATION		LCD REMOTE CONTROL	LCD REMOTE CONTROL	LCD REMOTE CONTROL	LCD REMOTE CONTROL
	AIR FLOW	SUPER HIGH	l/s / CFM	-	-	269/ 570	303/ 641
		HIGH	l/s / CFM	158/ 335	163/ 346	253/ 536	290/ 614
		MEDIUM	l/s / CFM	132/ 279	138/ 293	226/ 478	253/ 537
		LOW	l/s / CFM	105/ 222	113/ 240	200/ 424	224/ 474
		SILENT	l/s / CFM	-	-	177/ 375	197/ 418
	SOUND PRESSURE LEVEL (SH/H/M/L/SL)		dBA	38/ 32/ 27	38/ 34/ 29	44/ 42 / 39 / 36 / 34	48/ 46 / 43 / 40 / 37
	UNIT DIMENSION	HEIGHT X WIDTH X DEPTH	mm	288 X800 X 204	288 X800 X 204	310 X 1065 X 224	310 X 1065 X 224
	PACKING DIMENSION	HEIGHT X WIDTH X DEPTH	mm	350 X 874 X 280	350 X 874 X 280	370 X 1121 X 285	370 X 1121X 285
	UNIT WEIGHT		kg	12	12	14	14
	CONDENSATE DRAIN SIZE		mm	16	16	19.05	19.05
	FAN	TYPE		CROSS FLOW FAN	CROSS FLOW FAN	CROSS FLOW	CROSS FLOW
		DRIVE		DIRECT	DIRECT	DIRECT	DIRECT
	FAN MOTOR	TYPE		INDUCTION	INDUCTION	1-PHASE SCR	1-PHASE SCR
		INDEX OF PROTECTION (IP)		IP44	IP44	IP 44	IP44
		INSULATION GRADE		CLASS E	CLASS E	E	E
		RATED INPUT POWER	W	32	40	57	72
		RATED RUNNING CURRENT	A	0.17	0.20	0.27	0.34
		MOTOR OUTPUT	W	18	18	26	30
		POLES		4	4	4	4
	COIL	TUBE MATERIAL		SEAMLESS INNER GROOVE COPPER	SEAMLESS INNER GROOVE COPPER	SEAMLESS INNER GROOVE COPPER	SEAMLESS INNER GROOVE COPPER
		TUBE DIAMETER	mm	7	7	7	7
		FIN MATERIAL		ALUMINIUM (HYDROOHILIC FIN)	ALUMINIUM (HYDROOHILIC FIN)	ALUMINIUM	ALUMINIUM
		FIN FACE AREA	m^2	0.18	0.18	0.29	0.29
		FIN ROW		2	2	2	2
	AIR QUALITY	FILTER TYPE		MILDEW PROOF PP FILTER	MILDEW PROOF PP FILTER	SARANET	SARANET
		FILTER QUANTITY	pc	2	2	2	2
	CASING		COLOUR	WHITE	WHITE	WHITE	WHITE
OUTDOOR UNIT	AIR FLOW		l/s / CFM	396/ 840	457/ 969	596/ 1263	788/ 1670
	SOUND PRESSURE LEVEL		dBA	46	49	52	52
	UNIT DIMENSION	HEIGHT X WIDTH X DEPTH	mm	540 X 700 X 250	540 X 700 X 250	651 X 855 X 328	753 X 855 X 328
	PACKING DIMENSION	HEIGHT X WIDTH X DEPTH	mm	620 X 810 X 330	620 X 810 X 330	693 X 990 X 415	793 X 990 X 415
	UNIT WEIGHT		kg	34	34	47	50
	PIPE CONNECTION	TYPE		FLARE VALVE	FLARE VALVE	FLARE VALVE	FLARE VALVE
		SIZE LIQUID	mm	6.40	6.40	6.35	6.35
		SIZE GAS	mm	9.50	12.70	12.7	15.88
	FAN	TYPE		PROPELLER	PROPELLER	PROPELLER	PROPELLER
		DRIVE		DIRECT	DIRECT	DIRECT	DIRECT
	FAN MOTOR	TYPE		INDUCTION	INDUCTION	INDUCTION	INDUCTION
		INDEX OF PROTECTION (IP)		IP24	IP24	IP44	IP23
		INSULATION GRADE		CLASS B	CLASS B	B	F
		RATED INPUT POWER	W	52	59	105	123
		RATED RUNNING CURRENT	A	0.23	0.26	0.45	0.53
		MOTOR OUTPUT	W	35	35	43	60
		POLES		6	6	8	6
	COMPRESSOR	TYPE		ROTARY	ROTARY	ROTARY	ROTARY
		OIL TYPE		RB68A OR FREOL ALPHA68M	RB68A OR FREOL ALPHA68M	FV50S	FV50S
		OIL AMOUNT	cm^3	350	430	670	670
		RATED INPUT POWER (COOLING)	W	741	995	1473	1675
		RATED INPUT POWER (HEATING)	W	691	889	1328	1605
		RATED RUNNING CURRENT (COOLING)	A	3.30	4.64	6.47	7.39
		RATED RUNNING CURRENT (HEATING)	A	2.80	4.24	5.81	7.11
		LOCKED ROTOR AMP.	A	17	23	32	32.3
	COIL	TUBE MATERIAL		SEAMLESS INNER GROOVE COPPER	SEAMLESS INNER GROOVE COPPER	SEAMLESS INNER GROOVE COPPER	SEAMLESS INNER GROOVE COPPER
		TUBE DIAMETER	mm	7	7	7	7
		FIN MATERIAL		ALUMINIUM (RAISE LANCE)	ALUMINIUM (RAISE LANCE)	ALUMINIUM	ALUMINIUM
		FIN FACE AREA	m^2	0.36	0.36	0.50	0.61
		FIN ROW		2	2	2	2
	CASING		COLOUR	LIGHT GREY	LIGHT GREY	LIGHT GREY	LIGHT GREY
DRAWING NUMBER				000453103C1010	000453103C1515	0453103E2020	0453103E2525

1) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151 (NON-DUCTED UNIT) OR ISO 13253 (DUCTED UNIT).
2) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

COOLING	HEATING
INDOOR: 27°C DB / 19°C WB	INDOOR: 20°C DB
OUTDOOR: 35°C DB / 24°C WB	OUTDOOR: 8°C DB / 6°C WB

Performance Data

Calculation Steps

Interpolation method can be used to get the total capacity, TC and sensible capacity, SC and power input, PI at those temperatures which are not stated out in the table. Extrapolation method are not allowed to be used to get the TC, SC and PI

Example:

Model: MWM09J - MLC09C
Indoor Condition: 25°C DB, 17°C WB
Outdoor Condition: 37°C DB
Fan speed: High

Solution:

Overall
Based on the Performance table:

1. Refer to the Indoor DB column,
   - **25°C** is located between 24°C and 27°C for 16oCWB (Thus, Interpolation need to be applied)
   - **25°C** is located between 24°C and 27°C for 19oCWB (Thus, Interpolation need to be applied)
2. Refer to the Indoor WB column,
   - **17°C** is located between 16°CWB and 19°CWB for 25oCDB (Thus, Interpolation need to be applied)
3. Refer to the Outdoor DB column,
   - **37°C** is located between 35°C and 40°C. (Thus, Interpolation need to be applied)

Please follow the steps below in order to get the required capacity.

1st Step
Extrapolation of Indoor WB

Find TC, SC, PI for
(a) Indoor: ***25°C DB***, 16°C WB
Outdoor: 35°C DB
(b) Indoor: ***25°C DB***, 19°C WB
Outdoor: 35°C DB

(c) Indoor: ***25°C DB***, 16°C WB
Outdoor: 40°C DB
(d) Indoor: ***25°C DB***, 19°C WB
Outdoor: 40°C DB

2nd Step
Interpolation of Indoor DB

Find TC, SC, PI for
(a) Indoor: 25°C DB, ***17°C WB***
Outdoor: 35°C DB

(b) Indoor: 25°C DB, ***17°C WB***
Outdoor: 40°C DB

3rd Step
Interpolation of Outdoor DB

Find TC, SC, PI for
(a) Indoor: 25°C DB, 17°C WB
Outdoor: ***37°C DB***

Details:

1st Step:

To obtain the Total capacity, Sensible capacity and Power input for
(a) Indoor Condition: *25°C DB*, 16°C WB
Outdoor Condition: 35°C DB

Indoor DB˚C	Indoor WB˚C	Outdoor DB, ˚C			
			35		
			TC (kW)	SHC (kW)	PI (kW)
16					
	24		10.85	10.39	4.00
	25	.....	x_1	y_1	z_1
	27		11.03	11.03	4.01

Total capacity, TC

Interpolation Method:

$$\Rightarrow \frac{25^{o}\,C - 24^{o}\,C}{27^{o}\,C - 24^{o}\,C} = \frac{x_1 - 10.85kW}{11.03kW - 10.85kW}$$

$\Rightarrow x_1 = 10.91kW$

Power Input, PI

Interpolation Method:

$$\Rightarrow \frac{25^{o}\,C - 24^{o}\,C}{27^{o}\,C - 24^{o}\,C} = \frac{z_1 - 4.00kW}{4.01kW - 4.00kW}$$

$\Rightarrow z_1 = 4.00kW$

Sensible capacity, SHC

Interpolation Method:

$$\Rightarrow \frac{25^{o}\,C - 24^{o}\,C}{27^{o}\,C - 24^{o}\,C} = \frac{y_1 - 10.39kW}{11.03kW - 10.39kW}$$

$\Rightarrow y_1 = 10.60kW$

(b) Indoor Condition: *25°C DB*, 16°C WB
Outdoor Condition: 40°C DB

Indoor DB˚C	Indoor WB˚C	Outdoor DB, ˚C			
			40		
			TC (kW)	SHC (kW)	PI (kW)
16					
	24		10.42	10.23	4.36
	25	.....	x_2	y_2	z_2
	27		10.66	10.66	4.38

Total capacity, TC

Interpolation Method:

$$\Rightarrow \frac{25^{o}\,C - 24^{o}\,C}{27^{o}\,C - 24^{o}\,C} = \frac{x_2 - 10.42kW}{11.66kW - 10.42kW}$$

$\Rightarrow x_1 = 10.50kW$

Power Input, PI

Interpolation Method:

$$\Rightarrow \frac{25^{o}\,C - 24^{o}\,C}{27^{o}\,C - 24^{o}\,C} = \frac{z_2 - 4.36kW}{4.38kW - 4.36kW}$$

$\Rightarrow z_2 = 4.37kW$

Sensible capacity, SHC

Interpolation Method:

$$\Rightarrow \frac{25^{o}\,C - 24^{o}\,C}{27^{o}\,C - 24^{o}\,C} = \frac{y_2 - 10.23kW}{10.66kW - 10.23kW}$$

$\Rightarrow y_2 = 10.37kW$

*** Repeat process (a) and (b) in 1st step for the condition below:**

(c) Indoor Condition: ***25°C DB***, 19°C WB
Outdoor Condition: 35°C DB

$\Rightarrow x_3$= 11.65kW
$\Rightarrow y_3$= 8.94kW
$\Rightarrow z_3$= 4.08kW

(d) Indoor Condition: ***25°C DB***, 19°C WB
Outdoor Condition: 40°C DB

$\Rightarrow x_4$= 11.36kW
$\Rightarrow y_4$= 9.03kW
$\Rightarrow z_4$= 4.43kW

2nd Step:

To obtain the Total capacity, Sensible capacity and Power input for
(a) Indoor Condition: 25°C DB, ***17°C WB***
Outdoor Condition: 35°C DB

Indoor DB˚C	Indoor WB˚C	Outdoor DB, ˚C			
			35		
			TC (kW)	SHC (kW)	PI (kW)
16	25		10.91	10.60	4.00
17			x_5	y_5	z_5
19			11.65	8.94	4.08

Total capacity, TC

Interpolation Method:

$$\Rightarrow \frac{17^{o}\,C - 16^{o}\,C}{19^{o}\,C - 16^{o}\,C} = \frac{x_5 - 10.91kW}{11.65kW - 10.91kW}$$

$\Rightarrow x_5$ = 11.16kW

Power Input, PI

Interpolation Method:

$$\Rightarrow \frac{17^{o}\,C - 16^{o}\,C}{19^{o}\,C - 16^{o}\,C} = \frac{z_5 - 4.00kW}{4.08kW - 4.00kW}$$

$\Rightarrow z_5$ = 4.03kW

Sensible capacity, SHC

Interpolation Method:

$$\Rightarrow \frac{17^{o}\,C - 16^{o}\,C}{19^{o}\,C - 16^{o}\,C} = \frac{y_5 - 10.60kW}{8.94kW - 10.60kW}$$

$\Rightarrow y_5$ = 10.05kW

(b) Indoor Condition: 25°C DB, ***17°C WB***
Outdoor Condition: 40°C DB

Indoor DB˚C	Indoor WB˚C	Outdoor DB, ˚C			
			40		
			TC (kW)	SHC (kW)	PI (kW)
16	**25**		10.50	10.37	4.37
17		.....	x_6	y_6	z_6
18			11.36	9.03	4.43

Total capacity, TC

Interpolation Method:

$$\Rightarrow \frac{17^{o}\,C - 16^{o}\,C}{19^{o}\,C - 16^{o}\,C} = \frac{x_6 - 10.50kW}{11.36kW - 10.50kW}$$

$\Rightarrow x_6 = 10.79kW$

Power Input, PI

Interpolation Method:

$$\Rightarrow \frac{17^{o}\,C - 16^{o}\,C}{19^{o}\,C - 16^{o}\,C} = \frac{z_6 - 4.37kW}{4.43kW - 4.37kW}$$

$\Rightarrow z_6 = 4.39kW$

Sensible capacity, SHC

Interpolation Method:

$$\Rightarrow \frac{17^{o}\,C - 16^{o}\,C}{19^{o}\,C - 16^{o}\,C} = \frac{y_6 - 10.37kW}{9.03kW - 10.37kW}$$

$\Rightarrow y_5 = 10.05kW$

3rd Step:

To obtain the Total capacity and Sensible capacity for
(a) Indoor Condition: 25°C DB, 17°C WB
Outdoor Condition: 37°C DB

Indoor DB˚C	Indoor WB˚C	Outdoor DB, ˚C								
			35			37			40		
			TC (kW)	SHC (kW)	PI (kW)	TC (kW)	SHC (kW)	PI (kW)	TC (kW)	SHC (kW)	PI (kW)
23	**15**	.....	11.16	10.05	4.03	x	y	z	10.79	9.92	4.39

Total capacity, TC

Interpolation Method:

$$\Rightarrow \frac{37^{o}\,C - 35^{o}\,C}{40^{o}\,C - 35^{o}\,C} = \frac{x - 11.16kW}{10.79kW - 11.16kW}$$

$\Rightarrow x = 11.01kW$

Power Input, PI

Interpolation Method:

$$\Rightarrow \frac{37^{o}\,C - 35^{o}\,C}{40^{o}\,C - 35^{o}\,C} = \frac{z - 4.03kW}{4.39kW - 4.03kW}$$

$\Rightarrow z = 4.17kW$

Sensible capacity, SHC

Interpolation Method:

$$\Rightarrow \frac{37^{o}\,C - 35^{o}\,C}{40^{o}\,C - 35^{o}\,C} = \frac{y - 10.05kW}{9.92kW - 10.05kW}$$

$\Rightarrow y = 9.99kW$

Cooling Only (R22)

Model: MWM09J - MLC09C
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
222	16°C	21°C	2.32	1.82	0.70	2.24	1.77	0.76	2.16	1.72	0.82	2.07	1.67	0.89	1.90	1.56	0.97	1.75	1.46	1.07
		24°C	2.32	2.17	0.70	2.24	2.13	0.76	2.16	2.08	0.82	2.07	2.02	0.89	1.90	1.89	0.97	1.76	1.76	1.07
		27°C	2.34	2.34	0.70	2.26	2.26	0.76	2.18	2.18	0.83	2.10	2.10	0.90	1.94	1.94	0.97	1.80	1.80	1.07
		30°C	2.41	2.41	0.71	2.34	2.34	0.77	2.27	2.27	0.83	2.20	2.20	0.90	2.04	2.04	0.98	1.91	1.91	1.08
	19°C	24°C	2.56	1.70	0.71	2.47	1.65	0.77	2.38	1.61	0.84	2.29	1.56	0.91	2.10	1.46	0.99	1.94	1.37	1.09
		27°C	2.56	1.94	0.71	2.47	1.90	0.77	2.38	1.85	0.84	2.29	1.81	0.91	2.10	1.69	0.99	1.94	1.60	1.09
		30°C	2.57	2.39	0.71	2.48	2.34	0.77	2.39	2.29	0.84	2.30	2.24	0.91	2.12	2.09	0.99	1.96	1.96	1.09
		33°C	2.60	2.60	0.72	2.51	2.51	0.78	2.43	2.43	0.84	2.35	2.35	0.91	2.17	2.17	0.99	2.03	2.03	1.10
	22°C	27°C	2.82	1.66	0.73	2.72	1.62	0.79	2.62	1.58	0.85	2.52	1.54	0.93	2.31	1.43	1.01	2.14	1.35	1.11
		30°C	2.82	2.02	0.73	2.72	1.98	0.79	2.62	1.93	0.85	2.52	1.89	0.93	2.32	1.77	1.01	2.14	1.68	1.11
		33°C	2.82	2.36	0.73	2.72	2.32	0.79	2.62	2.27	0.85	2.52	2.22	0.93	2.32	2.09	1.01	2.15	1.98	1.11
		36°C	2.83	2.68	0.73	2.73	2.62	0.79	2.64	2.57	0.86	2.54	2.51	0.93	2.35	2.35	1.01	2.18	2.18	1.11
279	16°C	21°C	2.42	1.89	0.71	2.33	1.85	0.77	2.24	1.80	0.83	2.15	1.75	0.90	1.97	1.63	0.98	1.82	1.53	1.08
		24°C	2.42	2.30	0.71	2.34	2.25	0.77	2.25	2.19	0.83	2.16	2.14	0.90	1.98	1.98	0.98	1.83	1.83	1.08
		27°C	2.45	2.45	0.71	2.37	2.37	0.77	2.29	2.29	0.83	2.21	2.21	0.91	2.04	2.04	0.98	1.90	1.90	1.09
		30°C	2.55	2.55	0.72	2.48	2.48	0.78	2.40	2.40	0.84	2.33	2.33	0.91	2.16	2.16	0.99	2.01	2.01	1.10
	19°C	24°C	2.66	1.79	0.72	2.57	1.75	0.78	2.47	1.70	0.85	2.37	1.66	0.92	2.18	1.54	1.00	2.01	1.45	1.10
		27°C	2.67	2.06	0.72	2.57	2.02	0.78	2.47	1.97	0.85	2.37	1.93	0.92	2.18	1.80	1.00	2.02	1.71	1.10
		30°C	2.68	2.55	0.72	2.58	2.49	0.78	2.49	2.44	0.85	2.40	2.38	0.92	2.21	2.21	1.00	2.05	2.05	1.10
		33°C	2.72	2.72	0.72	2.64	2.64	0.79	2.56	2.56	0.85	2.47	2.47	0.93	2.29	2.29	1.01	2.14	2.14	1.11
	22°C	27°C	2.92	1.76	0.73	2.82	1.71	0.80	2.72	1.67	0.86	2.61	1.63	0.94	2.40	1.52	1.01	2.22	1.43	1.12
		30°C	2.93	2.15	0.73	2.82	2.11	0.80	2.72	2.06	0.86	2.61	2.01	0.94	2.40	1.89	1.02	2.22	1.79	1.12
		33°C	2.93	2.52	0.74	2.83	2.48	0.80	2.73	2.43	0.86	2.62	2.37	0.94	2.41	2.23	1.02	2.23	2.11	1.12
		36°C	2.95	2.85	0.74	2.86	2.80	0.80	2.76	2.74	0.87	2.66	2.66	0.94	2.45	2.45	1.02	2.28	2.28	1.13
335	16°C	21°C	2.50	1.98	0.72	2.41	1.93	0.77	2.32	1.88	0.84	2.22	1.82	0.91	2.04	1.70	0.99	1.88	1.60	1.09
		24°C	2.52	2.40	0.72	2.43	2.35	0.77	2.34	2.29	0.84	2.24	2.23	0.91	2.06	2.06	0.99	1.90	1.90	1.09
		27°C	2.56	2.56	0.72	2.47	2.47	0.78	2.39	2.39	0.84	2.31	2.31	0.91	2.13	2.13	0.99	1.99	1.99	1.10
		30°C	2.69	2.69	0.72	2.61	2.61	0.79	2.53	2.53	0.85	2.44	2.44	0.92	2.26	2.26	1.00	2.11	2.11	1.11
	19°C	24°C	2.76	1.90	0.73	2.66	1.85	0.79	2.56	1.80	0.85	2.45	1.75	0.93	2.25	1.63	1.00	2.08	1.54	1.11
		27°C	2.76	2.19	0.73	2.67	2.14	0.79	2.57	2.09	0.85	2.46	2.04	0.93	2.26	1.91	1.00	2.09	1.81	1.11
		30°C	2.79	2.70	0.73	2.69	2.64	0.79	2.59	2.58	0.86	2.49	2.49	0.93	2.30	2.30	1.01	2.13	2.13	1.11
		33°C	2.85	2.85	0.73	2.76	2.76	0.79	2.68	2.68	0.86	2.59	2.59	0.94	2.40	2.40	1.02	2.25	2.25	1.12
	22°C	27°C	3.03	1.86	0.74	2.92	1.82	0.80	2.81	1.77	0.87	2.69	1.72	0.94	2.48	1.61	1.02	2.29	1.52	1.13
		30°C	3.03	2.29	0.74	2.92	2.24	0.80	2.81	2.20	0.87	2.70	2.15	0.94	2.48	2.01	1.02	2.29	1.90	1.13
		33°C	3.04	2.68	0.74	2.94	2.63	0.80	2.83	2.58	0.87	2.72	2.52	0.95	2.50	2.36	1.03	2.32	2.24	1.13
		36°C	3.07	3.03	0.74	2.97	2.97	0.81	2.87	2.87	0.87	2.77	2.77	0.95	2.56	2.56	1.03	2.38	2.38	1.14

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Part Number : 0613103C0909

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: MWM15J - MLC15C
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
240	16°C	21°C	3.32	2.38	0.89	3.20	2.31	0.97	3.08	2.25	1.05	2.96	2.19	1.13	2.71	2.04	1.23	2.51	1.92	1.36
		24°C	3.32	2.85	0.89	3.20	2.78	0.97	3.08	2.72	1.05	2.96	2.65	1.14	2.72	2.47	1.23	2.52	2.33	1.36
		27°C	3.35	3.23	0.90	3.23	3.15	0.97	3.12	3.08	1.05	3.00	3.00	1.14	2.77	2.77	1.24	2.58	2.58	1.36
		30°C	3.45	3.45	0.90	3.35	3.35	0.97	3.25	3.25	1.06	3.14	3.14	1.15	2.91	2.91	1.25	2.73	2.73	1.38
	19°C	24°C	3.66	2.22	0.91	3.53	2.16	0.98	3.40	2.11	1.06	3.26	2.05	1.15	3.00	1.91	1.25	2.77	1.79	1.38
		27°C	3.66	2.54	0.91	3.53	2.48	0.98	3.40	2.42	1.06	3.27	2.37	1.15	3.00	2.21	1.25	2.78	2.10	1.38
		30°C	3.67	3.13	0.91	3.54	3.07	0.98	3.41	3.00	1.07	3.28	2.93	1.16	3.02	2.74	1.25	2.81	2.59	1.38
		33°C	3.71	3.71	0.91	3.59	3.59	0.99	3.47	3.47	1.07	3.35	3.35	1.16	3.10	3.10	1.26	2.90	2.90	1.39
	22°C	27°C	4.02	2.17	0.92	3.88	2.12	1.00	3.74	2.07	1.09	3.60	2.01	1.18	3.31	1.87	1.28	3.06	1.77	1.41
		30°C	4.02	2.65	0.92	3.89	2.59	1.00	3.74	2.53	1.09	3.60	2.47	1.18	3.31	2.31	1.28	3.06	2.19	1.41
		33°C	4.03	3.09	0.92	3.89	3.03	1.00	3.75	2.97	1.09	3.60	2.91	1.18	3.31	2.73	1.28	3.07	2.60	1.41
		36°C	4.04	3.51	0.92	3.91	3.44	1.00	3.77	3.36	1.09	3.63	3.29	1.18	3.35	3.08	1.28	3.12	2.93	1.41
293	16°C	21°C	3.45	2.48	0.90	3.33	2.42	0.97	3.20	2.35	1.06	3.07	2.29	1.14	2.82	2.13	1.24	2.60	2.00	1.37
		24°C	3.46	3.01	0.90	3.34	2.94	0.98	3.21	2.87	1.06	3.08	2.80	1.15	2.83	2.61	1.24	2.62	2.46	1.37
		27°C	3.50	3.42	0.90	3.38	3.34	0.98	3.27	3.25	1.06	3.15	3.15	1.15	2.91	2.91	1.25	2.71	2.71	1.38
		30°C	3.65	3.65	0.91	3.54	3.54	0.99	3.43	3.43	1.07	3.32	3.32	1.16	3.08	3.08	1.26	2.88	2.88	1.39
	19°C	24°C	3.80	2.35	0.92	3.67	2.29	0.99	3.53	2.23	1.07	3.39	2.17	1.17	3.11	2.02	1.26	2.87	1.90	1.39
		27°C	3.81	2.70	0.92	3.67	2.64	0.99	3.53	2.58	1.07	3.39	2.52	1.17	3.12	2.36	1.26	2.88	2.23	1.39
		30°C	3.83	3.33	0.92	3.69	3.26	0.99	3.56	3.19	1.08	3.42	3.11	1.17	3.15	2.91	1.27	2.93	2.75	1.40
		33°C	3.89	3.89	0.92	3.77	3.77	1.00	3.65	3.65	1.08	3.53	3.53	1.18	3.27	3.27	1.28	3.06	3.06	1.41
	22°C	27°C	4.18	2.30	0.93	4.03	2.24	1.01	3.88	2.19	1.10	3.73	2.13	1.19	3.42	1.98	1.29	3.17	1.87	1.42
		30°C	4.18	2.82	0.93	4.03	2.76	1.01	3.88	2.70	1.10	3.73	2.64	1.19	3.43	2.47	1.29	3.17	2.34	1.42
		33°C	4.19	3.30	0.93	4.04	3.24	1.01	3.89	3.17	1.10	3.74	3.11	1.19	3.44	2.91	1.29	3.19	2.77	1.42
		36°C	4.21	3.73	0.94	4.08	3.66	1.01	3.94	3.59	1.10	3.79	3.50	1.19	3.50	3.28	1.30	3.26	3.09	1.43
346	16°C	21°C	3.58	2.59	0.91	3.45	2.52	0.98	3.31	2.46	1.06	3.18	2.39	1.15	2.91	2.22	1.25	2.69	2.09	1.38
		24°C	3.60	3.14	0.91	3.47	3.07	0.98	3.34	2.99	1.07	3.20	2.92	1.16	2.94	2.72	1.25	2.72	2.57	1.38
		27°C	3.65	3.60	0.91	3.54	3.51	0.99	3.42	3.41	1.07	3.29	3.29	1.16	3.04	3.04	1.26	2.84	2.84	1.39
		30°C	3.84	3.84	0.92	3.73	3.73	1.00	3.61	3.61	1.08	3.49	3.49	1.17	3.23	3.23	1.28	3.02	3.02	1.41
	19°C	24°C	3.94	2.48	0.92	3.80	2.42	1.00	3.65	2.36	1.08	3.50	2.29	1.17	3.21	2.14	1.27	2.97	2.02	1.40
		27°C	3.95	2.87	0.92	3.81	2.81	1.00	3.66	2.74	1.08	3.52	2.67	1.18	3.23	2.50	1.28	2.98	2.37	1.41
		30°C	3.98	3.53	0.93	3.84	3.46	1.00	3.70	3.38	1.09	3.56	3.29	1.18	3.28	3.08	1.28	3.04	2.90	1.41
		33°C	4.07	4.07	0.93	3.95	3.95	1.01	3.83	3.83	1.09	3.70	3.70	1.19	3.43	3.43	1.29	3.21	3.21	1.43
	22°C	27°C	4.32	2.43	0.94	4.17	2.37	1.02	4.01	2.32	1.11	3.85	2.25	1.20	3.54	2.10	1.30	3.27	1.99	1.43
		30°C	4.33	2.99	0.94	4.18	2.94	1.02	4.02	2.87	1.11	3.86	2.81	1.20	3.54	2.63	1.30	3.28	2.49	1.43
		33°C	4.35	3.51	0.94	4.20	3.45	1.02	4.04	3.37	1.11	3.88	3.30	1.20	3.57	3.09	1.30	3.31	2.94	1.44
		36°C	4.38	3.96	0.94	4.25	3.89	1.02	4.10	3.80	1.11	3.95	3.71	1.21	3.65	3.46	1.31	3.41	3.26	1.44

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Part Number : 0611101C1515

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: MWM20J - MLC20C
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
424	16°C	21°C	5.39	3.66	1.41	5.20	3.57	1.52	5.01	3.47	1.65	4.80	3.37	1.79	4.41	3.14	1.94	4.07	2.95	2.14
		24°C	5.40	4.38	1.41	5.20	4.28	1.52	5.01	4.18	1.65	4.81	4.08	1.79	4.42	3.81	1.94	4.09	3.60	2.14
		27°C	5.44	4.97	1.41	5.26	4.86	1.52	5.07	4.74	1.65	4.88	4.62	1.79	4.50	4.30	1.94	4.19	4.04	2.14
		30°C	5.61	5.61	1.41	5.45	5.45	1.53	5.28	5.28	1.66	5.11	5.11	1.80	4.74	4.74	1.96	4.43	4.43	2.16
	19°C	24°C	5.94	3.42	1.43	5.74	3.33	1.55	5.53	3.24	1.67	5.31	3.15	1.82	4.88	2.93	1.97	4.51	2.76	2.17
		27°C	5.95	3.91	1.43	5.74	3.82	1.55	5.53	3.74	1.68	5.31	3.64	1.82	4.88	3.41	1.97	4.51	3.23	2.17
		30°C	5.96	4.83	1.43	5.75	4.72	1.55	5.55	4.62	1.68	5.34	4.51	1.82	4.91	4.22	1.97	4.56	3.99	2.18
		33°C	6.03	6.03	1.43	5.83	5.83	1.55	5.64	5.64	1.68	5.45	5.45	1.83	5.04	5.04	1.98	4.71	4.71	2.19
	22°C	27°C	6.54	3.35	1.45	6.31	3.26	1.58	6.08	3.18	1.71	5.85	3.10	1.85	5.38	2.88	2.01	4.98	2.72	2.21
		30°C	6.54	4.08	1.45	6.32	3.99	1.58	6.08	3.90	1.71	5.85	3.81	1.85	5.38	3.56	2.01	4.98	3.38	2.21
		33°C	6.55	4.76	1.45	6.32	4.67	1.58	6.09	4.58	1.71	5.85	4.48	1.85	5.38	4.21	2.01	4.99	4.00	2.22
		36°C	6.57	5.40	1.46	6.35	5.29	1.58	6.13	5.18	1.71	5.91	5.07	1.86	5.45	4.75	2.01	5.06	4.51	2.22
478	16°C	21°C	5.61	3.82	1.42	5.40	3.72	1.53	5.20	3.62	1.66	4.99	3.52	1.80	4.58	3.28	1.95	4.22	3.08	2.15
		24°C	5.62	4.63	1.42	5.42	4.53	1.53	5.22	4.42	1.66	5.01	4.31	1.80	4.60	4.02	1.96	4.25	3.79	2.16
		27°C	5.69	5.26	1.42	5.50	5.14	1.54	5.31	5.01	1.67	5.12	4.86	1.81	4.73	4.51	1.96	4.40	4.22	2.17
		30°C	5.93	5.93	1.43	5.76	5.76	1.55	5.58	5.58	1.68	5.40	5.40	1.83	5.00	5.00	1.98	4.68	4.68	2.19
	19°C	24°C	6.18	3.61	1.44	5.96	3.52	1.56	5.73	3.43	1.69	5.50	3.33	1.83	5.05	3.11	1.99	4.67	2.93	2.19
		27°C	6.19	4.16	1.44	5.97	4.07	1.56	5.74	3.98	1.69	5.51	3.88	1.83	5.07	3.63	1.99	4.68	3.44	2.19
		30°C	6.22	5.13	1.44	6.00	5.02	1.56	5.79	4.91	1.69	5.56	4.79	1.84	5.12	4.48	1.99	4.75	4.23	2.20
		33°C	6.32	6.32	1.45	6.13	6.13	1.57	5.93	5.93	1.70	5.74	5.74	1.85	5.31	5.31	2.01	4.97	4.97	2.22
	22°C	27°C	6.79	3.54	1.47	6.55	3.45	1.59	6.30	3.37	1.72	6.05	3.27	1.87	5.56	3.05	2.03	5.15	2.88	2.23
		30°C	6.80	4.34	1.47	6.56	4.25	1.59	6.31	4.15	1.72	6.06	4.06	1.87	5.57	3.80	2.03	5.15	3.61	2.23
		33°C	6.81	5.08	1.47	6.57	4.99	1.59	6.33	4.89	1.73	6.08	4.78	1.87	5.59	4.49	2.03	5.19	4.26	2.24
		36°C	6.85	5.75	1.47	6.63	5.64	1.60	6.40	5.52	1.73	6.16	5.39	1.88	5.69	5.05	2.04	5.30	4.76	2.25
536	16°C	21°C	5.81	3.98	1.43	5.60	3.88	1.55	5.39	3.78	1.67	5.16	3.67	1.82	4.74	3.42	1.97	4.36	3.22	2.17
		24°C	5.84	4.84	1.43	5.63	4.73	1.55	5.42	4.61	1.68	5.20	4.49	1.82	4.78	4.19	1.97	4.41	3.95	2.17
		27°C	5.94	5.55	1.44	5.74	5.40	1.55	5.55	5.25	1.68	5.35	5.09	1.83	4.95	4.72	1.98	4.61	4.40	2.19
		30°C	6.24	6.24	1.45	6.05	6.05	1.57	5.87	5.87	1.70	5.67	5.67	1.85	5.25	5.25	2.01	4.91	4.91	2.22
	19°C	24°C	6.40	3.82	1.45	6.17	3.73	1.57	5.93	3.63	1.70	5.69	3.53	1.85	5.22	3.29	2.00	4.82	3.11	2.21
		27°C	6.42	4.42	1.45	6.19	4.32	1.57	5.96	4.22	1.71	5.72	4.12	1.85	5.25	3.85	2.01	4.85	3.64	2.21
		30°C	6.47	5.44	1.46	6.24	5.32	1.58	6.02	5.20	1.71	5.79	5.07	1.85	5.33	4.73	2.01	4.95	4.46	2.22
		33°C	6.61	6.61	1.46	6.42	6.42	1.59	6.22	6.22	1.72	6.02	6.02	1.87	5.57	5.57	2.03	5.21	5.21	2.24
	22°C	27°C	7.02	3.74	1.48	6.77	3.66	1.60	6.52	3.56	1.74	6.26	3.47	1.89	5.75	3.24	2.04	5.31	3.06	2.25
		30°C	7.04	4.61	1.48	6.79	4.52	1.60	6.53	4.42	1.74	6.27	4.32	1.89	5.76	4.05	2.05	5.33	3.84	2.25
		33°C	7.06	5.40	1.48	6.82	5.31	1.61	6.57	5.19	1.74	6.31	5.08	1.89	5.80	4.76	2.05	5.38	4.52	2.26
		36°C	7.12	6.10	1.49	6.90	5.99	1.61	6.66	5.86	1.75	6.42	5.71	1.90	5.93	5.33	2.06	5.54	5.01	2.27

Part Number : 0612101C2020

Model: MWM25J – MLC25C
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
474	16°C	21°C	6.63	4.69	1.92	6.39	4.57	2.08	6.16	4.44	2.25	5.91	4.32	2.44	5.43	4.02	2.65	5.01	3.78	2.92
		24°C	6.64	5.61	1.92	6.40	5.49	2.08	6.16	5.36	2.25	5.92	5.23	2.44	5.44	4.88	2.65	5.03	4.61	2.92
		27°C	6.69	6.37	1.93	6.47	6.22	2.08	6.24	6.08	2.26	6.00	5.92	2.45	5.54	5.51	2.66	5.15	5.15	2.93
		30°C	6.90	6.90	1.93	6.70	6.70	2.10	6.49	6.49	2.27	6.29	6.29	2.47	5.83	5.83	2.68	5.45	5.45	2.96
	19°C	24°C	7.31	4.38	1.95	7.05	4.27	2.11	6.80	4.15	2.29	6.53	4.04	2.48	6.00	3.76	2.69	5.55	3.54	2.97
		27°C	7.32	5.01	1.95	7.06	4.90	2.11	6.80	4.78	2.29	6.53	4.67	2.48	6.00	4.37	2.70	5.55	4.14	2.97
		30°C	7.33	6.18	1.95	7.07	6.05	2.12	6.82	5.92	2.29	6.57	5.77	2.49	6.04	5.40	2.70	5.61	5.11	2.98
		33°C	7.41	7.41	1.96	7.17	7.17	2.12	6.94	6.94	2.30	6.70	6.70	2.50	6.20	6.20	2.71	5.80	5.80	2.99
	22°C	27°C	8.04	4.29	1.99	7.76	4.18	2.15	7.48	4.08	2.33	7.19	3.96	2.53	6.61	3.69	2.75	6.12	3.48	3.03
		30°C	8.05	5.22	1.99	7.77	5.11	2.15	7.48	4.99	2.34	7.19	4.88	2.53	6.61	4.56	2.75	6.12	4.33	3.03
		33°C	8.05	6.10	1.99	7.77	5.98	2.15	7.49	5.86	2.34	7.20	5.74	2.53	6.62	5.39	2.75	6.14	5.12	3.03
		36°C	8.08	6.92	1.99	7.81	6.78	2.16	7.54	6.64	2.34	7.26	6.49	2.54	6.70	6.08	2.75	6.23	5.77	3.04
537	16°C	21°C	6.90	4.89	1.94	6.65	4.76	2.10	6.40	4.64	2.27	6.13	4.51	2.46	5.63	4.20	2.67	5.19	3.95	2.94
		24°C	6.92	5.94	1.94	6.67	5.80	2.10	6.42	5.66	2.27	6.16	5.52	2.47	5.66	5.15	2.67	5.23	4.86	2.95
		27°C	7.00	6.74	1.95	6.77	6.58	2.10	6.53	6.42	2.28	6.30	6.22	2.47	5.81	5.78	2.69	5.42	5.41	2.96
		30°C	7.29	7.29	1.96	7.08	7.08	2.12	6.87	6.87	2.30	6.64	6.64	2.50	6.15	6.15	2.71	5.75	5.75	3.00
	19°C	24°C	7.60	4.63	1.97	7.33	4.51	2.13	7.05	4.39	2.31	6.77	4.27	2.51	6.22	3.98	2.72	5.74	3.75	3.00
		27°C	7.61	5.33	1.97	7.34	5.21	2.13	7.06	5.09	2.31	6.78	4.97	2.51	6.23	4.65	2.72	5.76	4.40	3.00
		30°C	7.65	6.57	1.97	7.38	6.43	2.14	7.12	6.29	2.32	6.84	6.13	2.51	6.30	5.74	2.73	5.85	5.42	3.01
		33°C	7.77	7.77	1.98	7.54	7.54	2.15	7.30	7.30	2.33	7.06	7.06	2.53	6.54	6.54	2.75	6.11	6.11	3.03
	22°C	27°C	8.35	4.53	2.01	8.05	4.42	2.17	7.75	4.31	2.36	7.45	4.20	2.56	6.84	3.91	2.77	6.33	3.69	3.05
		30°C	8.36	5.56	2.01	8.06	5.44	2.18	7.76	5.32	2.36	7.45	5.20	2.56	6.85	4.87	2.77	6.34	4.62	3.05
		33°C	8.37	6.51	2.01	8.08	6.39	2.18	7.79	6.26	2.36	7.48	6.13	2.56	6.88	5.75	2.78	6.38	5.46	3.06
		36°C	8.42	7.36	2.01	8.15	7.22	2.18	7.87	7.07	2.37	7.58	6.91	2.57	6.99	6.47	2.79	6.52	6.10	3.07
646	16°C	21°C	7.15	5.10	1.96	6.89	4.97	2.11	6.63	4.84	2.29	6.35	4.71	2.48	5.82	4.38	2.69	5.37	4.13	2.97
		24°C	7.19	6.20	1.96	6.93	6.05	2.12	6.67	5.91	2.29	6.40	5.75	2.49	5.88	5.37	2.70	5.43	5.06	2.97
		27°C	7.31	7.11	1.96	7.07	6.92	2.12	6.83	6.73	2.30	6.58	6.52	2.50	6.08	6.04	2.71	5.67	5.64	2.99
		30°C	7.67	7.67	1.98	7.45	7.45	2.15	7.22	7.22	2.33	6.98	6.98	2.53	6.46	6.46	2.74	6.04	6.04	3.03
	19°C	24°C	7.87	4.90	1.99	7.59	4.77	2.15	7.30	4.65	2.33	7.00	4.53	2.53	6.43	4.22	2.74	5.93	3.98	3.02
		27°C	7.90	5.66	1.99	7.61	5.53	2.15	7.33	5.40	2.33	7.03	5.27	2.53	6.45	4.93	2.74	5.97	4.67	3.02
		30°C	7.96	6.97	1.99	7.68	6.82	2.16	7.40	6.66	2.34	7.12	6.50	2.54	6.56	6.07	2.75	6.09	5.72	3.03
		33°C	8.13	8.13	2.00	7.89	7.89	2.17	7.65	7.65	2.35	7.40	7.40	2.56	6.85	6.85	2.78	6.41	6.41	3.07
	22°C	27°C	8.64	4.79	2.03	8.33	4.68	2.19	8.02	4.57	2.38	7.70	4.45	2.58	7.07	4.15	2.80	6.53	3.92	3.08
		30°C	8.66	5.90	2.03	8.35	5.79	2.19	8.03	5.67	2.38	7.71	5.54	2.58	7.08	5.18	2.80	6.55	4.92	3.08
		33°C	8.69	6.92	2.03	8.39	6.80	2.20	8.08	6.66	2.38	7.76	6.51	2.58	7.14	6.10	2.80	6.61	5.79	3.09
		36°C	8.76	7.81	2.03	8.49	7.67	2.20	8.20	7.50	2.39	7.90	7.32	2.59	7.30	6.82	2.82	6.81	6.42	3.11

Part Number: 000611101C2525

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Heat Pump (R22)

Model: MWM09JR - MLC09CR
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
222	16°C	21°C	2.32	1.82	0.70	2.24	1.77	0.76	2.16	1.72	0.82	2.07	1.67	0.89	1.90	1.56	0.97	1.75	1.46	1.07
		24°C	2.32	2.17	0.70	2.24	2.13	0.76	2.16	2.08	0.82	2.07	2.02	0.89	1.90	1.89	0.97	1.76	1.76	1.07
		27°C	2.34	2.34	0.70	2.26	2.26	0.76	2.18	2.18	0.83	2.10	2.10	0.90	1.94	1.94	0.97	1.80	1.80	1.07
		30°C	2.41	2.41	0.71	2.34	2.34	0.77	2.27	2.27	0.83	2.20	2.20	0.90	2.04	2.04	0.98	1.91	1.91	1.08
	19°C	24°C	2.56	1.70	0.71	2.47	1.65	0.77	2.38	1.61	0.84	2.29	1.56	0.91	2.10	1.46	0.99	1.94	1.37	1.09
		27°C	2.56	1.94	0.71	2.47	1.90	0.77	2.38	1.85	0.84	2.29	1.81	0.91	2.10	1.69	0.99	1.94	1.60	1.09
		30°C	2.57	2.39	0.71	2.48	2.34	0.77	2.39	2.29	0.84	2.30	2.24	0.91	2.12	2.09	0.99	1.96	1.96	1.09
		33°C	2.60	2.60	0.72	2.51	2.51	0.78	2.43	2.43	0.84	2.35	2.35	0.91	2.17	2.17	0.99	2.03	2.03	1.10
	22°C	27°C	2.82	1.66	0.73	2.72	1.62	0.79	2.62	1.58	0.85	2.52	1.54	0.93	2.31	1.43	1.01	2.14	1.35	1.11
		30°C	2.82	2.02	0.73	2.72	1.98	0.79	2.62	1.93	0.85	2.52	1.89	0.93	2.32	1.77	1.01	2.14	1.68	1.11
		33°C	2.82	2.36	0.73	2.72	2.32	0.79	2.62	2.27	0.85	2.52	2.22	0.93	2.32	2.09	1.01	2.15	1.98	1.11
		36°C	2.83	2.68	0.73	2.73	2.62	0.79	2.64	2.57	0.86	2.54	2.51	0.93	2.35	2.35	1.01	2.18	2.18	1.11
279	16°C	21°C	2.42	1.89	0.71	2.33	1.85	0.77	2.24	1.80	0.83	2.15	1.75	0.90	1.97	1.63	0.98	1.82	1.53	1.08
		24°C	2.42	2.30	0.71	2.34	2.25	0.77	2.25	2.19	0.83	2.16	2.14	0.90	1.98	1.98	0.98	1.83	1.83	1.08
		27°C	2.45	2.45	0.71	2.37	2.37	0.77	2.29	2.29	0.83	2.21	2.21	0.91	2.04	2.04	0.98	1.90	1.90	1.09
		30°C	2.55	2.55	0.72	2.48	2.48	0.78	2.40	2.40	0.84	2.33	2.33	0.91	2.16	2.16	0.99	2.01	2.01	1.10
	19°C	24°C	2.66	1.79	0.72	2.57	1.75	0.78	2.47	1.70	0.85	2.37	1.66	0.92	2.18	1.54	1.00	2.01	1.45	1.10
		27°C	2.67	2.06	0.72	2.57	2.02	0.78	2.47	1.97	0.85	2.37	1.93	0.92	2.18	1.80	1.00	2.02	1.71	1.10
		30°C	2.68	2.55	0.72	2.58	2.49	0.78	2.49	2.44	0.85	2.40	2.38	0.92	2.21	2.21	1.00	2.05	2.05	1.10
		33°C	2.72	2.72	0.72	2.64	2.64	0.79	2.56	2.56	0.85	2.47	2.47	0.93	2.29	2.29	1.01	2.14	2.14	1.11
	22°C	27°C	2.92	1.76	0.73	2.82	1.71	0.80	2.72	1.67	0.86	2.61	1.63	0.94	2.40	1.52	1.01	2.22	1.43	1.12
		30°C	2.93	2.15	0.73	2.82	2.11	0.80	2.72	2.06	0.86	2.61	2.01	0.94	2.40	1.89	1.02	2.22	1.79	1.12
		33°C	2.93	2.52	0.74	2.83	2.48	0.80	2.73	2.43	0.86	2.62	2.37	0.94	2.41	2.23	1.02	2.23	2.11	1.12
		36°C	2.95	2.85	0.74	2.86	2.80	0.80	2.76	2.74	0.87	2.66	2.66	0.94	2.45	2.45	1.02	2.28	2.28	1.13
335	16°C	21°C	2.50	1.98	0.72	2.41	1.93	0.77	2.32	1.88	0.84	2.22	1.82	0.91	2.04	1.70	0.99	1.88	1.60	1.09
		24°C	2.52	2.40	0.72	2.43	2.35	0.77	2.34	2.29	0.84	2.24	2.23	0.91	2.06	2.06	0.99	1.90	1.90	1.09
		27°C	2.56	2.56	0.72	2.47	2.47	0.78	2.39	2.39	0.84	2.31	2.31	0.91	2.13	2.13	0.99	1.99	1.99	1.10
		30°C	2.69	2.69	0.72	2.61	2.61	0.79	2.53	2.53	0.85	2.44	2.44	0.92	2.26	2.26	1.00	2.11	2.11	1.11
	19°C	24°C	2.76	1.90	0.73	2.66	1.85	0.79	2.56	1.80	0.85	2.45	1.75	0.93	2.25	1.63	1.00	2.08	1.54	1.11
		27°C	2.76	2.19	0.73	2.67	2.14	0.79	2.57	2.09	0.85	2.46	2.04	0.93	2.26	1.91	1.00	2.09	1.81	1.11
		30°C	2.79	2.70	0.73	2.69	2.64	0.79	2.59	2.58	0.86	2.49	2.49	0.93	2.30	2.30	1.01	2.13	2.13	1.11
		33°C	2.85	2.85	0.73	2.76	2.76	0.79	2.68	2.68	0.86	2.59	2.59	0.94	2.40	2.40	1.02	2.25	2.25	1.12
	22°C	27°C	3.03	1.86	0.74	2.92	1.82	0.80	2.81	1.77	0.87	2.69	1.72	0.94	2.48	1.61	1.02	2.29	1.52	1.13
		30°C	3.03	2.29	0.74	2.92	2.24	0.80	2.81	2.20	0.87	2.70	2.15	0.94	2.48	2.01	1.02	2.29	1.90	1.13
		33°C	3.04	2.68	0.74	2.94	2.63	0.80	2.83	2.58	0.87	2.72	2.52	0.95	2.50	2.36	1.03	2.32	2.24	1.13
		36°C	3.07	3.03	0.74	2.97	2.97	0.81	2.87	2.87	0.87	2.77	2.77	0.95	2.56	2.56	1.03	2.38	2.38	1.14

Part Number : 0612101C0909

Model: MWM09JR – MLC09CR
Heating Mode

ID DB °C	OUTDOOR WB °C													
	-9		-6		-5		6		12		15		18	
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
15	1.595	1.595	1.805	1.805	1.875	1.875	2.646	2.646	3.066	3.066	3.276	3.276	3.486	3.486
17	1.553	1.553	1.775	1.775	1.828	1.828	2.642	2.642	2.996	2.996	3.202	3.202	3.409	3.409
19	1.511	1.511	1.744	1.744	1.781	1.781	2.639	2.639	2.926	2.926	3.128	3.128	3.331	3.331
21	1.469	1.469	1.701	1.701	1.733	1.733	2.586	2.586	2.856	2.856	3.054	3.054	3.253	3.253
23	1.427	1.427	1.644	1.644	1.686	1.686	2.482	2.482	2.786	2.786	2.981	2.981	3.175	3.175
25	1.386	1.386	1.587	1.587	1.639	1.639	2.378	2.378	2.716	2.716	2.907	2.907	3.097	3.097
27	1.344	1.344	1.530	1.530	1.592	1.592	2.274	2.274	2.647	2.647	2.833	2.833	3.019	3.019
	FROST REGION													

Part Number: 00061210C0909

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: MWM15JR - MLC15CR
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
240	16°C	21°C	3.26	2.34	0.91	3.14	2.28	0.98	3.03	2.21	1.06	2.91	2.15	1.15	2.67	2.00	1.25	2.46	1.88	1.38
		24°C	3.26	2.80	0.91	3.15	2.73	0.98	3.03	2.67	1.06	2.91	2.60	1.15	2.67	2.43	1.25	2.47	2.29	1.38
		27°C	3.29	3.17	0.91	3.18	3.10	0.98	3.07	3.03	1.06	2.95	2.95	1.15	2.72	2.72	1.25	2.54	2.54	1.38
		30°C	3.39	3.39	0.91	3.29	3.29	0.99	3.19	3.19	1.07	3.09	3.09	1.16	2.87	2.87	1.26	2.68	2.68	1.39
	19°C	24°C	3.60	2.18	0.92	3.47	2.13	1.00	3.34	2.07	1.08	3.21	2.01	1.17	2.95	1.87	1.27	2.73	1.76	1.40
		27°C	3.60	2.50	0.92	3.47	2.44	1.00	3.34	2.38	1.08	3.21	2.33	1.17	2.95	2.18	1.27	2.73	2.06	1.40
		30°C	3.60	3.08	0.92	3.48	3.01	1.00	3.36	2.95	1.08	3.23	2.88	1.17	2.97	2.69	1.27	2.76	2.55	1.40
		33°C	3.65	3.65	0.92	3.53	3.53	1.00	3.41	3.41	1.08	3.30	3.30	1.18	3.05	3.05	1.28	2.85	2.85	1.41
	22°C	27°C	3.96	2.14	0.94	3.82	2.08	1.01	3.68	2.03	1.10	3.54	1.98	1.19	3.25	1.84	1.29	3.01	1.74	1.43
		30°C	3.96	2.60	0.94	3.82	2.55	1.01	3.68	2.49	1.10	3.54	2.43	1.19	3.25	2.27	1.29	3.01	2.16	1.43
		33°C	3.96	3.04	0.94	3.82	2.98	1.01	3.68	2.92	1.10	3.54	2.86	1.19	3.26	2.69	1.29	3.02	2.55	1.43
		36°C	3.97	3.45	0.94	3.84	3.38	1.02	3.71	3.31	1.10	3.57	3.23	1.20	3.29	3.03	1.30	3.06	2.88	1.43
293	16°C	21°C	3.39	2.44	0.91	3.27	2.37	0.99	3.15	2.31	1.07	3.02	2.25	1.16	2.77	2.09	1.26	2.55	1.97	1.39
		24°C	3.40	2.96	0.91	3.28	2.89	0.99	3.16	2.82	1.07	3.03	2.75	1.16	2.78	2.57	1.26	2.57	2.42	1.39
		27°C	3.44	3.36	0.92	3.33	3.28	0.99	3.21	3.20	1.07	3.10	3.10	1.17	2.86	2.86	1.27	2.66	2.66	1.40
		30°C	3.59	3.59	0.92	3.48	3.48	1.00	3.38	3.38	1.08	3.27	3.27	1.18	3.03	3.03	1.28	2.83	2.83	1.41
	19°C	24°C	3.74	2.31	0.93	3.60	2.25	1.01	3.47	2.19	1.09	3.33	2.13	1.18	3.06	1.98	1.28	2.82	1.87	1.41
		27°C	3.74	2.66	0.93	3.61	2.60	1.01	3.48	2.54	1.09	3.34	2.48	1.18	3.06	2.32	1.28	2.83	2.19	1.41
		30°C	3.76	3.28	0.93	3.63	3.21	1.01	3.50	3.13	1.09	3.37	3.06	1.18	3.10	2.86	1.28	2.88	2.70	1.42
		33°C	3.82	3.82	0.93	3.71	3.71	1.01	3.59	3.59	1.10	3.47	3.47	1.19	3.21	3.21	1.29	3.01	3.01	1.43
	22°C	27°C	4.11	2.26	0.95	3.96	2.20	1.02	3.81	2.15	1.11	3.66	2.09	1.20	3.37	1.95	1.31	3.11	1.84	1.44
		30°C	4.11	2.77	0.95	3.97	2.71	1.02	3.82	2.65	1.11	3.67	2.59	1.20	3.37	2.43	1.31	3.12	2.30	1.44
		33°C	4.12	3.25	0.95	3.98	3.18	1.03	3.83	3.12	1.11	3.68	3.05	1.21	3.38	2.86	1.31	3.14	2.72	1.44
		36°C	4.14	3.67	0.95	4.01	3.60	1.03	3.87	3.53	1.11	3.73	3.44	1.21	3.44	3.22	1.31	3.21	3.04	1.45
346	16°C	21°C	3.52	2.54	0.92	3.39	2.48	1.00	3.26	2.41	1.08	3.12	2.35	1.17	2.87	2.19	1.27	2.64	2.06	1.40
		24°C	3.54	3.09	0.92	3.41	3.02	1.00	3.28	2.94	1.08	3.15	2.87	1.17	2.89	2.68	1.27	2.67	2.52	1.40
		27°C	3.59	3.54	0.93	3.48	3.45	1.00	3.36	3.35	1.09	3.24	3.24	1.18	2.99	2.99	1.28	2.79	2.79	1.41
		30°C	3.77	3.77	0.93	3.66	3.66	1.01	3.55	3.55	1.10	3.43	3.43	1.19	3.18	3.18	1.29	2.97	2.97	1.43
	19°C	24°C	3.87	2.44	0.94	3.73	2.38	1.01	3.59	2.32	1.10	3.44	2.26	1.19	3.16	2.10	1.29	2.92	1.98	1.42
		27°C	3.88	2.82	0.94	3.74	2.76	1.01	3.60	2.69	1.10	3.46	2.63	1.19	3.18	2.46	1.29	2.93	2.33	1.42
		30°C	3.92	3.47	0.94	3.78	3.40	1.02	3.64	3.32	1.10	3.50	3.24	1.19	3.22	3.02	1.30	2.99	2.85	1.43
		33°C	4.00	4.00	0.94	3.88	3.88	1.02	3.76	3.76	1.11	3.64	3.64	1.20	3.37	3.37	1.31	3.15	3.15	1.44
	22°C	27°C	4.25	2.39	0.95	4.10	2.33	1.03	3.94	2.28	1.12	3.79	2.22	1.21	3.48	2.07	1.32	3.21	1.95	1.45
		30°C	4.26	2.94	0.95	4.11	2.89	1.03	3.95	2.82	1.12	3.79	2.76	1.22	3.48	2.58	1.32	3.22	2.45	1.45
		33°C	4.27	3.45	0.96	4.12	3.39	1.04	3.97	3.32	1.12	3.82	3.24	1.22	3.51	3.04	1.32	3.25	2.89	1.45
		36°C	4.31	3.89	0.96	4.18	3.82	1.04	4.03	3.74	1.13	3.89	3.65	1.22	3.59	3.40	1.33	3.35	3.20	1.46

Part Number : 0612101C1515

Model: MWM15JR – MLC15CR
Heating Mode

ID DB °C	OUTDOOR WB °C													
	-9		-6		-5		6		12		15		18	
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
15	2.303	2.303	2.607	2.607	2.708	2.708	3.821	3.821	4.429	4.429	4.732	4.732	5.036	5.036
17	2.243	2.243	2.514	2.514	2.632	2.632	3.817	3.817	4.283	4.283	4.574	4.574	4.866	4.866
19	2.183	2.183	2.421	2.421	2.555	2.555	3.812	3.812	4.137	4.137	4.417	4.417	4.696	4.696
21	2.122	2.122	2.345	2.345	2.478	2.478	3.708	3.708	3.992	3.992	4.259	4.259	4.526	4.526
23	2.062	2.062	2.287	2.287	2.402	2.402	3.503	3.503	3.846	3.846	4.101	4.101	4.356	4.356
25	2.001	2.001	2.229	2.229	2.325	2.325	3.298	3.298	3.700	3.700	3.943	3.943	4.185	4.185
27	1.941	1.941	2.171	2.171	2.248	2.248	3.093	3.093	3.554	3.554	3.785	3.785	4.015	4.015
	FROST REGION													

Part Number: 00061210C1515

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: MWM20JR - MLC20CR
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
424	16°C	21°C	5.39	3.66	1.41	5.20	3.57	1.52	5.01	3.47	1.65	4.80	3.37	1.79	4.41	3.14	1.94	4.07	2.95	2.14
		24°C	5.40	4.38	1.41	5.20	4.28	1.52	5.01	4.18	1.65	4.81	4.08	1.79	4.42	3.81	1.94	4.09	3.60	2.14
		27°C	5.44	4.97	1.41	5.26	4.86	1.52	5.07	4.74	1.65	4.88	4.62	1.79	4.50	4.30	1.94	4.19	4.04	2.14
		30°C	5.61	5.61	1.41	5.45	5.45	1.53	5.28	5.28	1.66	5.11	5.11	1.80	4.74	4.74	1.96	4.43	4.43	2.16
	19°C	24°C	5.94	3.42	1.43	5.74	3.33	1.55	5.53	3.24	1.67	5.31	3.15	1.82	4.88	2.93	1.97	4.51	2.76	2.17
		27°C	5.95	3.91	1.43	5.74	3.82	1.55	5.53	3.74	1.68	5.31	3.64	1.82	4.88	3.41	1.97	4.51	3.23	2.17
		30°C	5.96	4.83	1.43	5.75	4.72	1.55	5.55	4.62	1.68	5.34	4.51	1.82	4.91	4.22	1.97	4.56	3.99	2.18
		33°C	6.03	6.03	1.43	5.83	5.83	1.55	5.64	5.64	1.68	5.45	5.45	1.83	5.04	5.04	1.98	4.71	4.71	2.19
	22°C	27°C	6.54	3.35	1.45	6.31	3.26	1.58	6.08	3.18	1.71	5.85	3.10	1.85	5.38	2.88	2.01	4.98	2.72	2.21
		30°C	6.54	4.08	1.45	6.32	3.99	1.58	6.08	3.90	1.71	5.85	3.81	1.85	5.38	3.56	2.01	4.98	3.38	2.21
		33°C	6.55	4.76	1.45	6.32	4.67	1.58	6.09	4.58	1.71	5.85	4.48	1.85	5.38	4.21	2.01	4.99	4.00	2.22
		36°C	6.57	5.40	1.46	6.35	5.29	1.58	6.13	5.18	1.71	5.91	5.07	1.86	5.45	4.75	2.01	5.06	4.51	2.22
478	16°C	21°C	5.61	3.82	1.42	5.40	3.72	1.53	5.20	3.62	1.66	4.99	3.52	1.80	4.58	3.28	1.95	4.22	3.08	2.15
		24°C	5.62	4.63	1.42	5.42	4.53	1.53	5.22	4.42	1.66	5.01	4.31	1.80	4.60	4.02	1.96	4.25	3.79	2.16
		27°C	5.69	5.26	1.42	5.50	5.14	1.54	5.31	5.01	1.67	5.12	4.86	1.81	4.73	4.51	1.96	4.40	4.22	2.17
		30°C	5.93	5.93	1.43	5.76	5.76	1.55	5.58	5.58	1.68	5.40	5.40	1.83	5.00	5.00	1.98	4.68	4.68	2.19
	19°C	24°C	6.18	3.61	1.44	5.96	3.52	1.56	5.73	3.43	1.69	5.50	3.33	1.83	5.05	3.11	1.99	4.67	2.93	2.19
		27°C	6.19	4.16	1.44	5.97	4.07	1.56	5.74	3.98	1.69	5.51	3.88	1.83	5.07	3.63	1.99	4.68	3.44	2.19
		30°C	6.22	5.13	1.44	6.00	5.02	1.56	5.79	4.91	1.69	5.56	4.79	1.84	5.12	4.48	1.99	4.75	4.23	2.20
		33°C	6.32	6.32	1.45	6.13	6.13	1.57	5.93	5.93	1.70	5.74	5.74	1.85	5.31	5.31	2.01	4.97	4.97	2.22
	22°C	27°C	6.79	3.54	1.47	6.55	3.45	1.59	6.30	3.37	1.72	6.05	3.27	1.87	5.56	3.05	2.03	5.15	2.88	2.23
		30°C	6.80	4.34	1.47	6.56	4.25	1.59	6.31	4.15	1.72	6.06	4.06	1.87	5.57	3.80	2.03	5.15	3.61	2.23
		33°C	6.81	5.08	1.47	6.57	4.99	1.59	6.33	4.89	1.73	6.08	4.78	1.87	5.59	4.49	2.03	5.19	4.26	2.24
		36°C	6.85	5.75	1.47	6.63	5.64	1.60	6.40	5.52	1.73	6.16	5.39	1.88	5.69	5.05	2.04	5.30	4.76	2.25
536	16°C	21°C	5.81	3.98	1.43	5.60	3.88	1.55	5.39	3.78	1.67	5.16	3.67	1.82	4.74	3.42	1.97	4.36	3.22	2.17
		24°C	5.84	4.84	1.43	5.63	4.73	1.55	5.42	4.61	1.68	5.20	4.49	1.82	4.78	4.19	1.97	4.41	3.95	2.17
		27°C	5.94	5.55	1.44	5.74	5.40	1.55	5.55	5.25	1.68	5.35	5.09	1.83	4.95	4.72	1.98	4.61	4.40	2.19
		30°C	6.24	6.24	1.45	6.05	6.05	1.57	5.87	5.87	1.70	5.67	5.67	1.85	5.25	5.25	2.01	4.91	4.91	2.22
	19°C	24°C	6.40	3.82	1.45	6.17	3.73	1.57	5.93	3.63	1.70	5.69	3.53	1.85	5.22	3.29	2.00	4.82	3.11	2.21
		27°C	6.42	4.42	1.45	6.19	4.32	1.57	5.96	4.22	1.71	5.72	4.12	1.85	5.25	3.85	2.01	4.85	3.64	2.21
		30°C	6.47	5.44	1.46	6.24	5.32	1.58	6.02	5.20	1.71	5.79	5.07	1.85	5.33	4.73	2.01	4.95	4.46	2.22
		33°C	6.61	6.61	1.46	6.42	6.42	1.59	6.22	6.22	1.72	6.02	6.02	1.87	5.57	5.57	2.03	5.21	5.21	2.24
	22°C	27°C	7.02	3.74	1.48	6.77	3.66	1.60	6.52	3.56	1.74	6.26	3.47	1.89	5.75	3.24	2.04	5.31	3.06	2.25
		30°C	7.04	4.61	1.48	6.79	4.52	1.60	6.53	4.42	1.74	6.27	4.32	1.89	5.76	4.05	2.05	5.33	3.84	2.25
		33°C	7.06	5.40	1.48	6.82	5.31	1.61	6.57	5.19	1.74	6.31	5.08	1.89	5.80	4.76	2.05	5.38	4.52	2.26
		36°C	7.12	6.10	1.49	6.90	5.99	1.61	6.66	5.86	1.75	6.42	5.71	1.90	5.93	5.33	2.06	5.54	5.01	2.27

Part Number : 0612101C2020

Model: AWM25JR – ALC25CR
Heating Mode

ID DB °C	OUTDOOR WB °C													
	-9		-6		-5		6		12		15		18	
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
15	3.455	3.455	3.910	3.910	4.062	4.062	5.732	5.732	6.643	6.643	7.099	7.099	7.554	7.554
17	3.364	3.364	3.765	3.765	3.966	3.966	5.725	5.725	6.521	6.521	6.972	6.972	7.423	7.423
19	3.274	3.274	3.619	3.619	3.869	3.869	5.719	5.719	6.400	6.400	6.846	6.846	7.293	7.293
21	3.183	3.183	3.517	3.517	3.773	3.773	5.621	5.621	6.278	6.278	6.720	6.720	7.162	7.162
23	3.093	3.093	3.458	3.458	3.676	3.676	5.432	5.432	6.156	6.156	6.594	6.594	7.031	7.031
25	3.002	3.002	3.399	3.399	3.580	3.580	5.244	5.244	6.034	6.034	6.468	6.468	6.901	6.901
27	2.912	2.912	3.340	3.340	3.483	3.483	5.055	5.055	5.913	5.913	6.341	6.341	6.770	6.770
	FROST REGION													

Part Number: 00061210C2020

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: MWM25JR – MLC25CR
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
474	16°C	21°C	6.63	4.69	1.92	6.39	4.57	2.08	6.16	4.44	2.25	5.91	4.32	2.44	5.43	4.02	2.65	5.01	3.78	2.92
		24°C	6.64	5.61	1.92	6.40	5.49	2.08	6.16	5.36	2.25	5.92	5.23	2.44	5.44	4.88	2.65	5.03	4.61	2.92
		27°C	6.69	6.37	1.93	6.47	6.22	2.08	6.24	6.08	2.26	6.00	5.92	2.45	5.54	5.51	2.66	5.15	5.15	2.93
		30°C	6.90	6.90	1.93	6.70	6.70	2.10	6.49	6.49	2.27	6.29	6.29	2.47	5.83	5.83	2.68	5.45	5.45	2.96
	19°C	24°C	7.31	4.38	1.95	7.05	4.27	2.11	6.80	4.15	2.29	6.53	4.04	2.48	6.00	3.76	2.69	5.55	3.54	2.97
		27°C	7.32	5.01	1.95	7.06	4.90	2.11	6.80	4.78	2.29	6.53	4.67	2.48	6.00	4.37	2.70	5.55	4.14	2.97
		30°C	7.33	6.18	1.95	7.07	6.05	2.12	6.82	5.92	2.29	6.57	5.77	2.49	6.04	5.40	2.70	5.61	5.11	2.98
		33°C	7.41	7.41	1.96	7.17	7.17	2.12	6.94	6.94	2.30	6.70	6.70	2.50	6.20	6.20	2.71	5.80	5.80	2.99
	22°C	27°C	8.04	4.29	1.99	7.76	4.18	2.15	7.48	4.08	2.33	7.19	3.96	2.53	6.61	3.69	2.75	6.12	3.48	3.03
		30°C	8.05	5.22	1.99	7.77	5.11	2.15	7.48	4.99	2.34	7.19	4.88	2.53	6.61	4.56	2.75	6.12	4.33	3.03
		33°C	8.05	6.10	1.99	7.77	5.98	2.15	7.49	5.86	2.34	7.20	5.74	2.53	6.62	5.39	2.75	6.14	5.12	3.03
		36°C	8.08	6.92	1.99	7.81	6.78	2.16	7.54	6.64	2.34	7.26	6.49	2.54	6.70	6.08	2.75	6.23	5.77	3.04
537	16°C	21°C	6.90	4.89	1.94	6.65	4.76	2.10	6.40	4.64	2.27	6.13	4.51	2.46	5.63	4.20	2.67	5.19	3.95	2.94
		24°C	6.92	5.94	1.94	6.67	5.80	2.10	6.42	5.66	2.27	6.16	5.52	2.47	5.66	5.15	2.67	5.23	4.86	2.95
		27°C	7.00	6.74	1.95	6.77	6.58	2.10	6.53	6.42	2.28	6.30	6.22	2.47	5.81	5.78	2.69	5.42	5.41	2.96
		30°C	7.29	7.29	1.96	7.08	7.08	2.12	6.87	6.87	2.30	6.64	6.64	2.50	6.15	6.15	2.71	5.75	5.75	3.00
	19°C	24°C	7.60	4.63	1.97	7.33	4.51	2.13	7.05	4.39	2.31	6.77	4.27	2.51	6.22	3.98	2.72	5.74	3.75	3.00
		27°C	7.61	5.33	1.97	7.34	5.21	2.13	7.06	5.09	2.31	6.78	4.97	2.51	6.23	4.65	2.72	5.76	4.40	3.00
		30°C	7.65	6.57	1.97	7.38	6.43	2.14	7.12	6.29	2.32	6.84	6.13	2.51	6.30	5.74	2.73	5.85	5.42	3.01
		33°C	7.77	7.77	1.98	7.54	7.54	2.15	7.30	7.30	2.33	7.06	7.06	2.53	6.54	6.54	2.75	6.11	6.11	3.03
	22°C	27°C	8.35	4.53	2.01	8.05	4.42	2.17	7.75	4.31	2.36	7.45	4.20	2.56	6.84	3.91	2.77	6.33	3.69	3.05
		30°C	8.36	5.56	2.01	8.06	5.44	2.18	7.76	5.32	2.36	7.45	5.20	2.56	6.85	4.87	2.77	6.34	4.62	3.05
		33°C	8.37	6.51	2.01	8.08	6.39	2.18	7.79	6.26	2.36	7.48	6.13	2.56	6.88	5.75	2.78	6.38	5.46	3.06
		36°C	8.42	7.36	2.01	8.15	7.22	2.18	7.87	7.07	2.37	7.58	6.91	2.57	6.99	6.47	2.79	6.52	6.10	3.07
646	16°C	21°C	7.15	5.10	1.96	6.89	4.97	2.11	6.63	4.84	2.29	6.35	4.71	2.48	5.82	4.38	2.69	5.37	4.13	2.97
		24°C	7.19	6.20	1.96	6.93	6.05	2.12	6.67	5.91	2.29	6.40	5.75	2.49	5.88	5.37	2.70	5.43	5.06	2.97
		27°C	7.31	7.11	1.96	7.07	6.92	2.12	6.83	6.73	2.30	6.58	6.52	2.50	6.08	6.04	2.71	5.67	5.64	2.99
		30°C	7.67	7.67	1.98	7.45	7.45	2.15	7.22	7.22	2.33	6.98	6.98	2.53	6.46	6.46	2.74	6.04	6.04	3.03
	19°C	24°C	7.87	4.90	1.99	7.59	4.77	2.15	7.30	4.65	2.33	7.00	4.53	2.53	6.43	4.22	2.74	5.93	3.98	3.02
		27°C	7.90	5.66	1.99	7.61	5.53	2.15	7.33	5.40	2.33	7.03	5.27	2.53	6.45	4.93	2.74	5.97	4.67	3.02
		30°C	7.96	6.97	1.99	7.68	6.82	2.16	7.40	6.66	2.34	7.12	6.50	2.54	6.56	6.07	2.75	6.09	5.72	3.03
		33°C	8.13	8.13	2.00	7.89	7.89	2.17	7.65	7.65	2.35	7.40	7.40	2.56	6.85	6.85	2.78	6.41	6.41	3.07
	22°C	27°C	8.64	4.79	2.03	8.33	4.68	2.19	8.02	4.57	2.38	7.70	4.45	2.58	7.07	4.15	2.80	6.53	3.92	3.08
		30°C	8.66	5.90	2.03	8.35	5.79	2.19	8.03	5.67	2.38	7.71	5.54	2.58	7.08	5.18	2.80	6.55	4.92	3.08
		33°C	8.69	6.92	2.03	8.39	6.80	2.20	8.08	6.66	2.38	7.76	6.51	2.58	7.14	6.10	2.80	6.61	5.79	3.09
		36°C	8.76	7.81	2.03	8.49	7.67	2.20	8.20	7.50	2.39	7.90	7.32	2.59	7.30	6.82	2.82	6.81	6.42	3.11

Part Number: 000611101C2525

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: MWM25JR – MLC25CR
Heating Mode

ID DB °C	OUTDOOR WB °C													
	-9		-6		-5		6		12		15		18	
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
15	4.429	4.429	5.013	5.013	5.208	5.208	7.349	7.349	8.517	8.517	9.101	9.101	9.685	9.685
17	4.313	4.313	5.470	5.470	5.065	5.065	7.340	7.340	8.258	8.258	8.821	8.821	9.385	9.385
19	4.197	4.197	5.926	5.926	4.921	4.921	7.331	7.331	7.998	7.998	8.541	8.541	9.084	9.084
21	4.081	4.081	5.875	5.875	4.778	4.778	7.143	7.143	7.739	7.739	8.262	8.262	8.784	8.784
23	3.965	3.965	5.314	5.314	4.634	4.634	6.775	6.775	7.480	7.480	7.982	7.982	8.484	8.484
25	3.849	3.849	4.754	4.754	4.491	4.491	6.407	6.407	7.221	7.221	7.702	7.702	8.184	8.184
27	3.733	3.733	4.194	4.194	4.348	4.348	6.039	6.039	6.961	6.961	7.423	7.423	7.884	7.884
	FROST REGION													

Part Number: 00061210C2525

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. ▭ shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Cooling Only (R410A)

Model: M5WM10J - M5LC10CJ
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
222	16°C	21°C	2.50	1.93	0.63	2.41	1.88	0.68	2.32	1.83	0.73	2.23	1.78	0.80	2.04	1.65	0.86	1.89	1.56	0.95
		24°C	2.50	2.31	0.63	2.41	2.26	0.68	2.32	2.21	0.73	2.23	2.15	0.80	2.05	2.01	0.86	1.90	1.90	0.95
		27°C	2.52	2.52	0.63	2.44	2.44	0.68	2.35	2.35	0.74	2.26	2.26	0.80	2.09	2.09	0.87	1.94	1.94	0.96
		30°C	2.60	2.60	0.63	2.52	2.52	0.68	2.45	2.45	0.74	2.37	2.37	0.80	2.20	2.20	0.87	2.05	2.05	0.97
	19°C	24°C	2.76	1.80	0.64	2.66	1.76	0.69	2.56	1.71	0.75	2.46	1.66	0.81	2.26	1.55	0.88	2.09	1.46	0.97
		27°C	2.76	2.06	0.64	2.66	2.02	0.69	2.56	1.97	0.75	2.46	1.92	0.81	2.26	1.80	0.88	2.09	1.70	0.97
		30°C	2.76	2.55	0.64	2.67	2.49	0.69	2.57	2.44	0.75	2.47	2.38	0.81	2.28	2.22	0.88	2.11	2.10	0.97
		33°C	2.79	2.79	0.64	2.70	2.70	0.69	2.62	2.62	0.75	2.53	2.53	0.81	2.34	2.34	0.88	2.19	2.19	0.98
	22°C	27°C	3.03	1.77	0.65	2.93	1.72	0.70	2.82	1.68	0.76	2.71	1.63	0.83	2.49	1.52	0.90	2.31	1.43	0.99
		30°C	3.03	2.15	0.65	2.93	2.11	0.70	2.82	2.06	0.76	2.71	2.01	0.83	2.49	1.88	0.90	2.31	1.78	0.99
		33°C	3.03	2.51	0.65	2.93	2.46	0.70	2.82	2.42	0.76	2.71	2.37	0.83	2.50	2.22	0.90	2.31	2.11	0.99
		36°C	3.04	2.85	0.65	2.94	2.79	0.70	2.84	2.73	0.76	2.74	2.67	0.83	2.52	2.51	0.90	2.35	2.35	0.99
279	16°C	21°C	2.60	2.02	0.63	2.51	1.96	0.68	2.41	1.91	0.74	2.31	1.86	0.80	2.12	1.73	0.87	1.96	1.63	0.96
		24°C	2.61	2.45	0.63	2.51	2.39	0.68	2.42	2.33	0.74	2.32	2.27	0.80	2.13	2.12	0.87	1.97	1.97	0.96
		27°C	2.64	2.64	0.63	2.55	2.55	0.69	2.46	2.46	0.74	2.37	2.37	0.81	2.19	2.19	0.88	2.04	2.04	0.97
		30°C	2.75	2.75	0.64	2.67	2.67	0.69	2.59	2.59	0.75	2.50	2.50	0.81	2.32	2.32	0.88	2.17	2.17	0.98
	19°C	24°C	2.86	1.91	0.64	2.76	1.86	0.70	2.66	1.81	0.75	2.55	1.76	0.82	2.34	1.64	0.89	2.16	1.55	0.98
		27°C	2.87	2.20	0.64	2.77	2.15	0.70	2.66	2.10	0.75	2.56	2.05	0.82	2.35	1.92	0.89	2.17	1.81	0.98
		30°C	2.88	2.71	0.64	2.78	2.65	0.70	2.68	2.59	0.76	2.58	2.53	0.82	2.38	2.36	0.89	2.20	2.20	0.98
		33°C	2.93	2.93	0.65	2.84	2.84	0.70	2.75	2.75	0.76	2.66	2.66	0.82	2.46	2.46	0.90	2.30	2.30	0.99
	22°C	27°C	3.15	1.87	0.65	3.04	1.82	0.71	2.92	1.78	0.77	2.81	1.73	0.83	2.58	1.61	0.90	2.39	1.52	1.00
		30°C	3.15	2.29	0.65	3.04	2.24	0.71	2.93	2.19	0.77	2.81	2.14	0.83	2.58	2.01	0.90	2.39	1.90	1.00
		33°C	3.16	2.68	0.66	3.05	2.63	0.71	2.93	2.58	0.77	2.82	2.52	0.83	2.59	2.37	0.91	2.40	2.25	1.00
		36°C	3.18	3.03	0.66	3.07	2.98	0.71	2.97	2.92	0.77	2.86	2.85	0.84	2.64	2.64	0.91	2.46	2.46	1.00
335	16°C	21°C	2.70	2.10	0.64	2.60	2.05	0.69	2.50	2.00	0.75	2.39	1.94	0.81	2.20	1.81	0.88	2.02	1.70	0.97
		24°C	2.71	2.56	0.64	2.61	2.50	0.69	2.51	2.43	0.75	2.41	2.37	0.81	2.22	2.21	0.88	2.05	2.05	0.97
		27°C	2.75	2.75	0.64	2.66	2.66	0.69	2.57	2.57	0.75	2.48	2.48	0.81	2.29	2.29	0.88	2.14	2.14	0.98
		30°C	2.89	2.89	0.65	2.81	2.81	0.70	2.72	2.72	0.76	2.63	2.63	0.82	2.44	2.44	0.90	2.28	2.28	0.99
	19°C	24°C	2.97	2.02	0.65	2.86	1.97	0.70	2.75	1.92	0.76	2.64	1.87	0.82	2.42	1.74	0.89	2.24	1.64	0.98
		27°C	2.98	2.33	0.65	2.87	2.28	0.70	2.76	2.23	0.76	2.65	2.17	0.83	2.43	2.03	0.89	2.25	1.92	0.99
		30°C	3.00	2.87	0.65	2.89	2.81	0.70	2.79	2.75	0.76	2.68	2.68	0.83	2.47	2.47	0.90	2.29	2.29	0.99
		33°C	3.07	3.07	0.65	2.98	2.98	0.71	2.88	2.88	0.77	2.79	2.79	0.83	2.58	2.58	0.91	2.42	2.42	1.00
	22°C	27°C	3.26	1.97	0.66	3.14	1.93	0.72	3.02	1.88	0.78	2.90	1.83	0.84	2.66	1.71	0.91	2.46	1.61	1.00
		30°C	3.26	2.43	0.66	3.15	2.39	0.72	3.03	2.34	0.78	2.91	2.28	0.84	2.67	2.14	0.91	2.47	2.03	1.00
		33°C	3.27	2.85	0.66	3.16	2.80	0.72	3.04	2.74	0.78	2.93	2.68	0.84	2.69	2.51	0.91	2.49	2.39	1.01
		36°C	3.30	3.22	0.66	3.20	3.16	0.72	3.09	3.09	0.78	2.98	2.98	0.85	2.75	2.75	0.92	2.57	2.57	1.01

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Part Number : 0651101C1010

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: M5WM15J - M5LC15CJ
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
240	16°C	21°C	2.97	2.18	0.83	2.86	2.13	0.90	2.76	2.07	0.97	2.65	2.01	1.06	2.43	1.87	1.15	2.24	1.76	1.26
		24°C	2.97	2.62	0.83	2.87	2.56	0.90	2.76	2.50	0.97	2.65	2.43	1.06	2.44	2.27	1.15	2.25	2.15	1.26
		27°C	3.00	2.97	0.83	2.90	2.90	0.90	2.80	2.80	0.98	2.69	2.69	1.06	2.48	2.48	1.15	2.31	2.31	1.27
		30°C	3.09	3.09	0.84	3.00	3.00	0.91	2.91	2.91	0.98	2.82	2.82	1.07	2.61	2.61	1.16	2.44	2.44	1.28
	19°C	24°C	3.28	2.04	0.84	3.16	1.99	0.91	3.04	1.94	0.99	2.92	1.88	1.07	2.69	1.75	1.17	2.48	1.65	1.28
		27°C	3.28	2.33	0.84	3.16	2.28	0.91	3.05	2.23	0.99	2.93	2.17	1.07	2.69	2.03	1.17	2.49	1.93	1.28
		30°C	3.28	2.88	0.84	3.17	2.82	0.91	3.06	2.76	0.99	2.94	2.69	1.08	2.71	2.52	1.17	2.51	2.38	1.29
		33°C	3.32	3.32	0.85	3.21	3.21	0.92	3.11	3.11	0.99	3.00	3.00	1.08	2.78	2.78	1.17	2.60	2.60	1.29
	22°C	27°C	3.60	2.00	0.86	3.48	1.95	0.93	3.35	1.90	1.01	3.22	1.85	1.10	2.96	1.72	1.19	2.74	1.62	1.31
		30°C	3.60	2.43	0.86	3.48	2.38	0.93	3.35	2.33	1.01	3.22	2.27	1.10	2.96	2.13	1.19	2.74	2.02	1.31
		33°C	3.61	2.84	0.86	3.48	2.79	0.93	3.35	2.73	1.01	3.22	2.68	1.10	2.97	2.51	1.19	2.75	2.39	1.31
		36°C	3.62	3.22	0.86	3.50	3.16	0.93	3.38	3.09	1.01	3.25	3.02	1.10	3.00	2.83	1.19	2.79	2.69	1.31
293	16°C	21°C	3.09	2.28	0.84	2.98	2.22	0.91	2.87	2.16	0.98	2.75	2.10	1.06	2.52	1.96	1.16	2.33	1.84	1.27
		24°C	3.10	2.77	0.84	2.99	2.70	0.91	2.88	2.64	0.98	2.76	2.57	1.07	2.54	2.40	1.16	2.34	2.26	1.27
		27°C	3.14	3.14	0.84	3.03	3.03	0.91	2.93	2.93	0.99	2.82	2.82	1.07	2.61	2.61	1.16	2.43	2.43	1.28
		30°C	3.27	3.27	0.85	3.17	3.17	0.92	3.08	3.08	0.99	2.98	2.98	1.08	2.76	2.76	1.17	2.58	2.58	1.30
	19°C	24°C	3.40	2.16	0.85	3.28	2.10	0.92	3.16	2.05	1.00	3.03	1.99	1.08	2.79	1.86	1.18	2.57	1.75	1.30
		27°C	3.41	2.48	0.85	3.29	2.43	0.92	3.17	2.37	1.00	3.04	2.32	1.08	2.79	2.17	1.18	2.58	2.05	1.30
		30°C	3.43	3.06	0.85	3.31	3.00	0.92	3.19	2.93	1.00	3.07	2.86	1.09	2.82	2.67	1.18	2.62	2.53	1.30
		33°C	3.48	3.48	0.86	3.38	3.38	0.93	3.27	3.27	1.01	3.16	3.16	1.09	2.93	2.93	1.19	2.74	2.74	1.31
	22°C	27°C	3.74	2.11	0.87	3.61	2.06	0.94	3.47	2.01	1.02	3.34	1.96	1.11	3.07	1.82	1.20	2.84	1.72	1.32
		30°C	3.75	2.59	0.87	3.61	2.54	0.94	3.48	2.48	1.02	3.34	2.42	1.11	3.07	2.27	1.20	2.84	2.15	1.32
		33°C	3.75	3.04	0.87	3.62	2.98	0.94	3.49	2.92	1.02	3.35	2.85	1.11	3.08	2.68	1.20	2.86	2.54	1.32
		36°C	3.77	3.43	0.87	3.65	3.37	0.94	3.53	3.30	1.02	3.40	3.22	1.11	3.13	3.01	1.20	2.92	2.84	1.33
346	16°C	21°C	3.20	2.38	0.85	3.09	2.32	0.91	2.97	2.26	0.99	2.85	2.19	1.07	2.61	2.04	1.16	2.41	1.92	1.28
		24°C	3.22	2.89	0.85	3.10	2.82	0.92	2.99	2.75	0.99	2.87	2.68	1.08	2.63	2.50	1.17	2.43	2.36	1.29
		27°C	3.27	3.27	0.85	3.17	3.17	0.92	3.06	3.06	1.00	2.95	2.95	1.08	2.73	2.73	1.17	2.54	2.54	1.29
		30°C	3.44	3.44	0.86	3.34	3.34	0.93	3.23	3.23	1.01	3.13	3.13	1.09	2.90	2.90	1.19	2.70	2.70	1.31
	19°C	24°C	3.53	2.28	0.86	3.40	2.22	0.93	3.27	2.17	1.01	3.14	2.11	1.09	2.88	1.97	1.19	2.66	1.85	1.31
		27°C	3.54	2.64	0.86	3.41	2.58	0.93	3.28	2.52	1.01	3.15	2.46	1.09	2.89	2.30	1.19	2.67	2.17	1.31
		30°C	3.57	3.25	0.86	3.44	3.18	0.93	3.32	3.10	1.01	3.19	3.03	1.10	2.94	2.83	1.19	2.73	2.66	1.31
		33°C	3.64	3.64	0.87	3.54	3.54	0.94	3.43	3.43	1.02	3.32	3.32	1.11	3.07	3.07	1.20	2.87	2.87	1.33
	22°C	27°C	3.87	2.23	0.88	3.73	2.18	0.95	3.59	2.13	1.03	3.45	2.07	1.11	3.17	1.93	1.21	2.93	1.83	1.33
		30°C	3.88	2.75	0.88	3.74	2.70	0.95	3.60	2.64	1.03	3.46	2.58	1.12	3.17	2.42	1.21	2.94	2.29	1.33
		33°C	3.89	3.22	0.88	3.76	3.17	0.95	3.62	3.10	1.03	3.48	3.03	1.12	3.20	2.84	1.21	2.96	2.70	1.33
		36°C	3.93	3.64	0.88	3.80	3.57	0.95	3.67	3.50	1.03	3.54	3.41	1.12	3.27	3.18	1.22	3.05	2.99	1.34

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Part Number : 0651101C1515

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: M5WM20J - M5LC20CJ
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
424	16°C	21°C	4.95	3.55	1.24	4.78	3.46	1.34	4.60	3.36	1.46	4.41	3.27	1.58	4.05	3.04	1.71	3.74	2.86	1.89
		24°C	4.96	4.25	1.24	4.78	4.15	1.34	4.60	4.06	1.46	4.42	3.96	1.58	4.06	3.69	1.71	3.76	3.49	1.89
		27°C	5.00	4.82	1.24	4.83	4.71	1.35	4.66	4.60	1.46	4.48	4.48	1.58	4.14	4.14	1.72	3.85	3.85	1.89
		30°C	5.15	5.15	1.25	5.00	5.00	1.35	4.85	4.85	1.47	4.69	4.69	1.59	4.35	4.35	1.73	4.07	4.07	1.91
	19°C	24°C	5.46	3.31	1.26	5.27	3.23	1.37	5.08	3.14	1.48	4.87	3.06	1.61	4.48	2.85	1.74	4.14	2.68	1.92
		27°C	5.46	3.79	1.26	5.27	3.71	1.37	5.08	3.62	1.48	4.88	3.53	1.61	4.48	3.31	1.74	4.15	3.13	1.92
		30°C	5.47	4.68	1.26	5.28	4.58	1.37	5.10	4.48	1.48	4.90	4.37	1.61	4.52	4.09	1.74	4.19	3.87	1.92
		33°C	5.54	5.54	1.27	5.36	5.36	1.37	5.18	5.18	1.49	5.01	5.01	1.61	4.63	4.63	1.75	4.33	4.33	1.94
	22°C	27°C	6.01	3.24	1.28	5.80	3.17	1.39	5.59	3.09	1.51	5.37	3.00	1.64	4.94	2.80	1.78	4.57	2.64	1.96
		30°C	6.01	3.95	1.28	5.80	3.87	1.39	5.59	3.78	1.51	5.37	3.69	1.64	4.94	3.46	1.78	4.57	3.28	1.96
		33°C	6.01	4.62	1.29	5.80	4.53	1.39	5.59	4.44	1.51	5.37	4.35	1.64	4.95	4.08	1.78	4.58	3.88	1.96
		36°C	6.03	5.24	1.29	5.83	5.13	1.39	5.63	5.02	1.51	5.43	4.91	1.64	5.00	4.61	1.78	4.65	4.37	1.96
478	16°C	21°C	5.15	3.70	1.25	4.96	3.61	1.36	4.78	3.51	1.47	4.58	3.41	1.59	4.20	3.18	1.73	3.88	2.99	1.90
		24°C	5.17	4.49	1.25	4.98	4.39	1.36	4.79	4.28	1.47	4.60	4.18	1.59	4.23	3.90	1.73	3.91	3.68	1.90
		27°C	5.23	5.10	1.26	5.05	4.98	1.36	4.88	4.86	1.47	4.70	4.70	1.60	4.34	4.34	1.74	4.05	4.05	1.92
		30°C	5.45	5.45	1.27	5.29	5.29	1.37	5.13	5.13	1.49	4.96	4.96	1.61	4.60	4.60	1.75	4.30	4.30	1.94
	19°C	24°C	5.67	3.50	1.27	5.47	3.41	1.38	5.27	3.32	1.49	5.06	3.23	1.62	4.64	3.01	1.76	4.29	2.84	1.94
		27°C	5.68	4.03	1.27	5.48	3.94	1.38	5.28	3.86	1.49	5.06	3.76	1.62	4.65	3.52	1.76	4.30	3.33	1.94
		30°C	5.71	4.98	1.28	5.51	4.87	1.38	5.32	4.76	1.50	5.11	4.64	1.62	4.71	4.34	1.76	4.37	4.10	1.94
		33°C	5.81	5.81	1.28	5.63	5.63	1.39	5.45	5.45	1.50	5.27	5.27	1.63	4.88	4.88	1.77	4.56	4.56	1.96
	22°C	27°C	6.23	3.43	1.30	6.02	3.35	1.41	5.79	3.26	1.52	5.56	3.18	1.65	5.11	2.96	1.79	4.73	2.79	1.97
		30°C	6.24	4.21	1.30	6.02	4.12	1.41	5.80	4.03	1.52	5.57	3.93	1.65	5.12	3.68	1.79	4.73	3.50	1.97
		33°C	6.25	4.93	1.30	6.04	4.84	1.41	5.81	4.74	1.53	5.59	4.64	1.65	5.14	4.35	1.79	4.76	4.13	1.98
		36°C	6.29	5.57	1.30	6.09	5.47	1.41	5.88	5.35	1.53	5.66	5.23	1.66	5.22	4.89	1.80	4.87	4.62	1.99
536	16°C	21°C	5.34	3.86	1.26	5.15	3.76	1.37	4.95	3.67	1.48	4.74	3.56	1.60	4.35	3.32	1.74	4.01	3.12	1.92
		24°C	5.37	4.69	1.27	5.17	4.58	1.37	4.98	4.47	1.48	4.78	4.35	1.61	4.39	4.06	1.74	4.05	3.83	1.92
		27°C	5.46	5.38	1.27	5.28	5.24	1.37	5.10	5.09	1.49	4.92	4.92	1.61	4.54	4.54	1.75	4.23	4.23	1.94
		30°C	5.73	5.73	1.28	5.56	5.56	1.39	5.39	5.39	1.50	5.21	5.21	1.63	4.83	4.83	1.77	4.51	4.51	1.96
	19°C	24°C	5.88	3.70	1.28	5.67	3.61	1.39	5.45	3.52	1.51	5.23	3.43	1.63	4.80	3.19	1.77	4.43	3.01	1.95
		27°C	5.90	4.29	1.29	5.68	4.19	1.39	5.47	4.09	1.51	5.25	3.99	1.64	4.82	3.73	1.77	4.46	3.53	1.95
		30°C	5.94	5.27	1.29	5.73	5.16	1.39	5.53	5.04	1.51	5.32	4.92	1.64	4.90	4.59	1.78	4.54	4.33	1.96
		33°C	6.07	6.07	1.29	5.90	5.90	1.40	5.71	5.71	1.52	5.53	5.53	1.65	5.12	5.12	1.80	4.79	4.79	1.98
	22°C	27°C	6.45	3.62	1.31	6.22	3.54	1.42	5.99	3.46	1.54	5.75	3.36	1.67	5.28	3.14	1.81	4.88	2.96	1.99
		30°C	6.46	4.47	1.31	6.23	4.38	1.42	6.00	4.29	1.54	5.76	4.19	1.67	5.29	3.92	1.81	4.89	3.72	1.99
		33°C	6.49	5.24	1.31	6.26	5.14	1.42	6.03	5.04	1.54	5.79	4.93	1.67	5.33	4.62	1.81	4.94	4.38	2.00
		36°C	6.54	5.91	1.31	6.34	5.80	1.42	6.12	5.68	1.54	5.90	5.54	1.68	5.45	5.16	1.82	5.09	4.86	2.01
570	16°C	21°C	5.34	3.90	1.28	5.15	3.80	1.37	4.96	3.71	1.49	4.77	3.61	1.61	4.38	3.36	1.76	4.05	3.17	1.96
		24°C	5.36	4.76	1.28	5.17	4.66	1.37	4.98	4.56	1.49	4.79	4.45	1.62	4.40	4.16	1.76	4.08	3.93	1.96
		27°C	5.45	5.45	1.28	5.28	5.28	1.38	5.11	5.11	1.49	4.94	4.94	1.62	4.58	4.58	1.77	4.28	4.28	1.97
		30°C	5.74	5.74	1.29	5.58	5.58	1.39	5.42	5.42	1.51	5.25	5.25	1.64	4.87	4.87	1.79	4.56	4.56	1.99
	19°C	24°C	5.88	3.74	1.30	5.67	3.65	1.40	5.47	3.56	1.51	5.26	3.47	1.64	4.84	3.24	1.79	4.48	3.06	1.98
		27°C	5.89	4.33	1.30	5.69	4.24	1.40	5.48	4.15	1.51	5.27	4.06	1.64	4.85	3.81	1.79	4.49	3.61	1.99
		30°C	5.92	5.38	1.30	5.72	5.27	1.40	5.53	5.15	1.51	5.33	5.03	1.64	4.92	4.70	1.79	4.59	4.43	1.99
		33°C	6.08	6.08	1.31	5.90	5.90	1.41	5.74	5.74	1.53	5.57	5.57	1.66	5.17	5.17	1.81	4.85	4.85	2.01
	22°C	27°C	6.46	3.66	1.32	6.24	3.58	1.42	6.02	3.50	1.54	5.79	3.41	1.67	5.33	3.19	1.82	4.94	3.02	2.02
		30°C	6.47	4.53	1.32	6.25	4.44	1.42	6.03	4.35	1.54	5.80	4.25	1.67	5.34	3.99	1.82	4.95	3.79	2.02
		33°C	6.49	5.34	1.32	6.26	5.24	1.43	6.04	5.15	1.54	5.82	5.05	1.67	5.36	4.74	1.82	4.98	4.51	2.02
		36°C	6.55	6.05	1.33	6.34	5.93	1.43	6.14	5.81	1.55	5.94	5.66	1.68	5.50	5.29	1.83	5.14	5.00	2.03

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Part Number : 0651101C2020

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: M5WM25J - M5LC25CJ
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
474	16°C	21°C	5.67	3.96	1.42	5.47	3.85	1.54	5.26	3.75	1.66	5.05	3.64	1.80	4.64	3.39	1.96	4.28	3.19	2.16
		24°C	5.67	4.74	1.42	5.47	4.63	1.54	5.27	4.52	1.66	5.06	4.41	1.81	4.65	4.12	1.96	4.30	3.89	2.16
		27°C	5.72	5.37	1.42	5.53	5.25	1.54	5.33	5.13	1.67	5.13	4.99	1.81	4.74	4.65	1.96	4.41	4.36	2.17
		30°C	5.90	5.90	1.43	5.73	5.73	1.55	5.55	5.55	1.68	5.37	5.37	1.82	4.98	4.98	1.98	4.66	4.66	2.19
	19°C	24°C	6.25	3.69	1.44	6.03	3.60	1.56	5.81	3.50	1.69	5.58	3.41	1.84	5.13	3.17	1.99	4.74	2.99	2.20
		27°C	6.26	4.23	1.44	6.03	4.13	1.56	5.81	4.04	1.69	5.58	3.94	1.84	5.13	3.68	1.99	4.75	3.49	2.20
		30°C	6.26	5.22	1.44	6.05	5.10	1.56	5.83	4.99	1.69	5.61	4.87	1.84	5.17	4.56	1.99	4.79	4.31	2.20
		33°C	6.34	6.34	1.45	6.13	6.13	1.57	5.93	5.93	1.70	5.73	5.73	1.85	5.30	5.30	2.00	4.96	4.96	2.21
	22°C	27°C	6.88	3.62	1.47	6.64	3.53	1.59	6.40	3.44	1.73	6.15	3.34	1.87	5.65	3.12	2.03	5.23	2.94	2.24
		30°C	6.88	4.41	1.47	6.64	4.31	1.59	6.40	4.21	1.73	6.15	4.11	1.87	5.65	3.85	2.03	5.23	3.65	2.24
		33°C	6.88	5.15	1.47	6.64	5.05	1.59	6.40	4.95	1.73	6.15	4.85	1.87	5.66	4.55	2.03	5.25	4.32	2.24
		36°C	6.91	5.83	1.47	6.68	5.72	1.59	6.45	5.60	1.73	6.21	5.48	1.88	5.73	5.13	2.04	5.33	4.87	2.24
537	16°C	21°C	5.90	4.13	1.43	5.68	4.02	1.55	5.47	3.91	1.68	5.24	3.80	1.82	4.81	3.54	1.97	4.44	3.33	2.18
		24°C	5.91	5.01	1.43	5.70	4.89	1.55	5.49	4.77	1.68	5.27	4.65	1.82	4.84	4.34	1.98	4.47	4.10	2.18
		27°C	5.98	5.69	1.44	5.78	5.56	1.56	5.58	5.41	1.69	5.38	5.25	1.83	4.97	4.88	1.99	4.63	4.56	2.19
		30°C	6.23	6.23	1.45	6.05	6.05	1.57	5.87	5.87	1.70	5.68	5.68	1.85	5.26	5.26	2.01	4.92	4.92	2.21
	19°C	24°C	6.50	3.90	1.46	6.26	3.81	1.58	6.03	3.71	1.71	5.79	3.60	1.85	5.31	3.36	2.01	4.91	3.17	2.21
		27°C	6.51	4.50	1.46	6.27	4.40	1.58	6.04	4.30	1.71	5.80	4.19	1.85	5.33	3.92	2.01	4.92	3.71	2.22
		30°C	6.54	5.55	1.46	6.31	5.43	1.58	6.08	5.30	1.71	5.85	5.17	1.86	5.39	4.84	2.01	5.00	4.57	2.22
		33°C	6.65	6.65	1.46	6.44	6.44	1.59	6.24	6.24	1.72	6.03	6.03	1.87	5.59	5.59	2.03	5.22	5.22	2.24
	22°C	27°C	7.14	3.82	1.48	6.89	3.73	1.61	6.63	3.64	1.74	6.37	3.54	1.89	5.85	3.30	2.05	5.41	3.11	2.26
		30°C	7.15	4.69	1.48	6.89	4.59	1.61	6.64	4.49	1.74	6.37	4.39	1.89	5.86	4.11	2.05	5.42	3.90	2.26
		33°C	7.16	5.49	1.48	6.91	5.39	1.61	6.66	5.28	1.74	6.39	5.17	1.89	5.88	4.85	2.05	5.45	4.60	2.26
		36°C	7.20	6.21	1.49	6.97	6.09	1.61	6.73	5.97	1.75	6.48	5.83	1.90	5.98	5.45	2.06	5.58	5.15	2.27
614	16°C	21°C	6.11	4.31	1.45	5.89	4.20	1.56	5.66	4.09	1.69	5.43	3.97	1.83	4.98	3.70	1.99	4.59	3.48	2.19
		24°C	6.15	5.23	1.45	5.92	5.11	1.57	5.70	4.98	1.70	5.47	4.85	1.84	5.02	4.53	1.99	4.64	4.27	2.20
		27°C	6.25	5.99	1.45	6.04	5.84	1.57	5.84	5.68	1.70	5.63	5.50	1.85	5.20	5.10	2.01	4.85	4.76	2.21
		30°C	6.56	6.56	1.46	6.37	6.37	1.59	6.17	6.17	1.72	5.97	5.97	1.87	5.53	5.53	2.03	5.16	5.16	2.24
	19°C	24°C	6.73	4.13	1.47	6.49	4.03	1.59	6.24	3.92	1.72	5.99	3.82	1.87	5.49	3.56	2.03	5.07	3.36	2.23
		27°C	6.75	4.78	1.47	6.51	4.67	1.59	6.26	4.56	1.72	6.01	4.45	1.87	5.52	4.16	2.03	5.10	3.93	2.23
		30°C	6.81	5.88	1.47	6.56	5.75	1.59	6.33	5.62	1.73	6.09	5.48	1.87	5.60	5.12	2.03	5.20	4.82	2.24
		33°C	6.95	6.95	1.48	6.75	6.75	1.60	6.54	6.54	1.74	6.33	6.33	1.89	5.86	5.86	2.05	5.48	5.48	2.27
	22°C	27°C	7.38	4.04	1.50	7.12	3.95	1.62	6.85	3.85	1.76	6.58	3.75	1.91	6.04	3.50	2.07	5.58	3.30	2.28
		30°C	7.40	4.98	1.50	7.14	4.89	1.62	6.87	4.78	1.76	6.59	4.67	1.91	6.06	4.37	2.07	5.60	4.15	2.28
		33°C	7.43	5.84	1.50	7.17	5.73	1.62	6.91	5.61	1.76	6.63	5.49	1.91	6.10	5.15	2.07	5.65	4.88	2.28
		36°C	7.49	6.59	1.50	7.26	6.47	1.63	7.01	6.33	1.77	6.75	6.17	1.92	6.24	5.76	2.08	5.82	5.42	2.30
641	16°C	21°C	6.11	4.34	1.46	5.90	4.24	1.57	5.68	4.13	1.70	5.46	4.02	1.85	5.02	3.75	2.01	4.63	3.53	2.24
		24°C	6.13	5.31	1.46	5.91	5.19	1.57	5.70	5.08	1.70	5.48	4.96	1.85	5.04	4.64	2.01	4.67	4.38	2.24
		27°C	6.23	6.09	1.46	6.04	5.93	1.58	5.85	5.78	1.71	5.65	5.61	1.86	5.24	5.24	2.03	4.89	4.89	2.25
		30°C	6.57	6.57	1.48	6.39	6.39	1.59	6.20	6.20	1.73	6.01	6.01	1.88	5.57	5.57	2.05	5.22	5.22	2.28
	19°C	24°C	6.73	4.16	1.48	6.49	4.06	1.60	6.26	3.97	1.73	6.02	3.87	1.88	5.54	3.61	2.04	5.12	3.41	2.27
		27°C	6.75	4.83	1.48	6.51	4.73	1.60	6.28	4.63	1.73	6.04	4.53	1.88	5.55	4.24	2.05	5.14	4.03	2.27
		30°C	6.78	6.00	1.49	6.55	5.87	1.60	6.33	5.75	1.73	6.10	5.61	1.88	5.63	5.24	2.05	5.25	4.94	2.28
		33°C	6.96	6.96	1.49	6.76	6.76	1.61	6.57	6.57	1.74	6.37	6.37	1.90	5.92	5.92	2.07	5.55	5.55	2.30
	22°C	27°C	7.39	4.08	1.51	7.14	3.99	1.63	6.89	3.90	1.76	6.63	3.80	1.91	6.10	3.55	2.08	5.66	3.36	2.31
		30°C	7.41	5.05	1.51	7.15	4.95	1.63	6.90	4.84	1.76	6.64	4.74	1.91	6.12	4.45	2.08	5.67	4.23	2.31
		33°C	7.43	5.95	1.51	7.17	5.84	1.63	6.92	5.74	1.76	6.66	5.63	1.91	6.14	5.29	2.08	5.71	5.02	2.31
		36°C	7.50	6.74	1.52	7.26	6.61	1.63	7.02	6.47	1.77	6.80	6.31	1.92	6.29	5.90	2.09	5.89	5.57	2.32

Part Number : 0651101C2525

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Heat Pump (R410A)

Model: M5WM10JR - M5LC10CRJ
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
222	16°C	21°C	2.50	1.93	0.61	2.41	1.88	0.66	2.32	1.83	0.71	2.23	1.78	0.77	2.04	1.65	0.84	1.89	1.56	0.93
		24°C	2.50	2.31	0.61	2.41	2.26	0.66	2.32	2.21	0.71	2.23	2.15	0.77	2.05	2.01	0.84	1.90	1.90	0.93
		27°C	2.52	2.52	0.61	2.44	2.44	0.66	2.35	2.35	0.72	2.26	2.26	0.78	2.09	2.09	0.84	1.94	1.94	0.93
		30°C	2.60	2.60	0.61	2.52	2.52	0.66	2.45	2.45	0.72	2.37	2.37	0.78	2.20	2.20	0.85	2.05	2.05	0.94
	19°C	24°C	2.76	1.80	0.62	2.66	1.76	0.67	2.56	1.71	0.73	2.46	1.66	0.79	2.26	1.55	0.85	2.09	1.46	0.94
		27°C	2.76	2.06	0.62	2.66	2.02	0.67	2.56	1.97	0.73	2.46	1.92	0.79	2.26	1.80	0.85	2.09	1.70	0.94
		30°C	2.76	2.55	0.62	2.67	2.49	0.67	2.57	2.44	0.73	2.47	2.38	0.79	2.28	2.22	0.86	2.11	2.10	0.94
		33°C	2.79	2.79	0.62	2.70	2.70	0.67	2.62	2.62	0.73	2.53	2.53	0.79	2.34	2.34	0.86	2.19	2.19	0.95
	22°C	27°C	3.03	1.77	0.63	2.93	1.72	0.68	2.82	1.68	0.74	2.71	1.63	0.80	2.49	1.52	0.87	2.31	1.43	0.96
		30°C	3.03	2.15	0.63	2.93	2.11	0.68	2.82	2.06	0.74	2.71	2.01	0.80	2.49	1.88	0.87	2.31	1.78	0.96
		33°C	3.03	2.51	0.63	2.93	2.46	0.68	2.82	2.42	0.74	2.71	2.37	0.80	2.50	2.22	0.87	2.31	2.11	0.96
		36°C	3.04	2.85	0.63	2.94	2.79	0.68	2.84	2.73	0.74	2.74	2.67	0.80	2.52	2.51	0.87	2.35	2.35	0.96
279	16°C	21°C	2.60	2.02	0.61	2.51	1.96	0.66	2.41	1.91	0.72	2.31	1.86	0.78	2.12	1.73	0.85	1.96	1.63	0.93
		24°C	2.61	2.45	0.62	2.51	2.39	0.67	2.42	2.33	0.72	2.32	2.27	0.78	2.13	2.12	0.85	1.97	1.97	0.93
		27°C	2.64	2.64	0.62	2.55	2.55	0.67	2.46	2.46	0.72	2.37	2.37	0.78	2.19	2.19	0.85	2.04	2.04	0.94
		30°C	2.75	2.75	0.62	2.67	2.67	0.67	2.59	2.59	0.73	2.50	2.50	0.79	2.32	2.32	0.86	2.17	2.17	0.95
	19°C	24°C	2.86	1.91	0.62	2.76	1.86	0.68	2.66	1.81	0.73	2.55	1.76	0.79	2.34	1.64	0.86	2.16	1.55	0.95
		27°C	2.87	2.20	0.63	2.77	2.15	0.68	2.66	2.10	0.73	2.56	2.05	0.79	2.35	1.92	0.86	2.17	1.81	0.95
		30°C	2.88	2.71	0.63	2.78	2.65	0.68	2.68	2.59	0.73	2.58	2.53	0.80	2.38	2.36	0.86	2.20	2.20	0.95
		33°C	2.93	2.93	0.63	2.84	2.84	0.68	2.75	2.75	0.74	2.66	2.66	0.80	2.46	2.46	0.87	2.30	2.30	0.96
	22°C	27°C	3.15	1.87	0.64	3.04	1.82	0.69	2.92	1.78	0.75	2.81	1.73	0.81	2.58	1.61	0.88	2.39	1.52	0.97
		30°C	3.15	2.29	0.64	3.04	2.24	0.69	2.93	2.19	0.75	2.81	2.14	0.81	2.58	2.01	0.88	2.39	1.90	0.97
		33°C	3.16	2.68	0.64	3.05	2.63	0.69	2.93	2.58	0.75	2.82	2.52	0.81	2.59	2.37	0.88	2.40	2.25	0.97
		36°C	3.18	3.03	0.64	3.07	2.98	0.69	2.97	2.92	0.75	2.86	2.85	0.81	2.64	2.64	0.88	2.46	2.46	0.97
335	16°C	21°C	2.70	2.10	0.62	2.60	2.05	0.67	2.50	2.00	0.73	2.39	1.94	0.79	2.20	1.81	0.85	2.02	1.70	0.94
		24°C	2.71	2.56	0.62	2.61	2.50	0.67	2.51	2.43	0.73	2.41	2.37	0.79	2.22	2.21	0.85	2.05	2.05	0.94
		27°C	2.75	2.75	0.62	2.66	2.66	0.67	2.57	2.57	0.73	2.48	2.48	0.79	2.29	2.29	0.86	2.14	2.14	0.95
		30°C	2.89	2.89	0.63	2.81	2.81	0.68	2.72	2.72	0.74	2.63	2.63	0.80	2.44	2.44	0.87	2.28	2.28	0.96
	19°C	24°C	2.97	2.02	0.63	2.86	1.97	0.68	2.75	1.92	0.74	2.64	1.87	0.80	2.42	1.74	0.87	2.24	1.64	0.96
		27°C	2.98	2.33	0.63	2.87	2.28	0.68	2.76	2.23	0.74	2.65	2.17	0.80	2.43	2.03	0.87	2.25	1.92	0.96
		30°C	3.00	2.87	0.63	2.89	2.81	0.68	2.79	2.75	0.74	2.68	2.68	0.80	2.47	2.47	0.87	2.29	2.29	0.96
		33°C	3.07	3.07	0.63	2.98	2.98	0.69	2.88	2.88	0.75	2.79	2.79	0.81	2.58	2.58	0.88	2.42	2.42	0.97
	22°C	27°C	3.26	1.97	0.64	3.14	1.93	0.70	3.02	1.88	0.75	2.90	1.83	0.82	2.66	1.71	0.89	2.46	1.61	0.98
		30°C	3.26	2.43	0.64	3.15	2.39	0.70	3.03	2.34	0.75	2.91	2.28	0.82	2.67	2.14	0.89	2.47	2.03	0.98
		33°C	3.27	2.85	0.64	3.16	2.80	0.70	3.04	2.74	0.76	2.93	2.68	0.82	2.69	2.51	0.89	2.49	2.39	0.98
		36°C	3.30	3.22	0.64	3.20	3.16	0.70	3.09	3.09	0.76	2.98	2.98	0.82	2.75	2.75	0.89	2.57	2.57	0.99

Part Number : 06512101C1010

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: M5WM10JR - M5LC10CRJ
Heating Mode

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.692	1.692	1.915	1.915	1.989	1.989	2.807	2.807	3.253	3.253	3.476	3.476	3.700	3.700
17	1.648	1.648	1.850	1.850	1.944	1.944	2.804	2.804	3.201	3.201	3.423	3.423	3.645	3.645
19	1.603	1.603	1.785	1.785	1.898	1.898	2.801	2.801	3.149	3.149	3.370	3.370	3.591	3.591
21	1.559	1.559	1.737	1.737	1.852	1.852	2.757	2.757	3.097	3.097	3.317	3.317	3.536	3.536
23	1.515	1.515	1.705	1.705	1.806	1.806	2.674	2.674	3.045	3.045	3.263	3.263	3.482	3.482
25	1.470	1.470	1.674	1.674	1.760	1.760	2.591	2.591	2.993	2.993	3.210	3.210	3.428	3.428
27	1.426	1.426	1.642	1.642	1.714	1.714	2.508	2.508	2.941	2.941	3.157	3.157	3.373	3.373
	FROST REGION													

Part Number : 0652102C1010

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: M5WM15JR - M5LC15CRJ
Cooling Mode

AFR (CFM)	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
240	16°C	21°C	2.97	2.18	0.83	2.86	2.13	0.90	2.76	2.07	0.97	2.65	2.01	1.06	2.43	1.87	1.15	2.24	1.76	1.26
		24°C	2.97	2.62	0.83	2.87	2.56	0.90	2.76	2.50	0.97	2.65	2.43	1.06	2.44	2.27	1.15	2.25	2.15	1.26
		27°C	3.00	2.97	0.83	2.90	2.90	0.90	2.80	2.80	0.98	2.69	2.69	1.06	2.48	2.48	1.15	2.31	2.31	1.27
		30°C	3.09	3.09	0.84	3.00	3.00	0.91	2.91	2.91	0.98	2.82	2.82	1.07	2.61	2.61	1.16	2.44	2.44	1.28
	19°C	24°C	3.28	2.04	0.84	3.16	1.99	0.91	3.04	1.94	0.99	2.92	1.88	1.07	2.69	1.75	1.17	2.48	1.65	1.28
		27°C	3.28	2.33	0.84	3.16	2.28	0.91	3.05	2.23	0.99	2.93	2.17	1.07	2.69	2.03	1.17	2.49	1.93	1.28
		30°C	3.28	2.88	0.84	3.17	2.82	0.91	3.06	2.76	0.99	2.94	2.69	1.08	2.71	2.52	1.17	2.51	2.38	1.29
		33°C	3.32	3.32	0.85	3.21	3.21	0.92	3.11	3.11	0.99	3.00	3.00	1.08	2.78	2.78	1.17	2.60	2.60	1.29
	22°C	27°C	3.60	2.00	0.86	3.48	1.95	0.93	3.35	1.90	1.01	3.22	1.85	1.10	2.96	1.72	1.19	2.74	1.62	1.31
		30°C	3.60	2.43	0.86	3.48	2.38	0.93	3.35	2.33	1.01	3.22	2.27	1.10	2.96	2.13	1.19	2.74	2.02	1.31
		33°C	3.61	2.84	0.86	3.48	2.79	0.93	3.35	2.73	1.01	3.22	2.68	1.10	2.97	2.51	1.19	2.75	2.39	1.31
		36°C	3.62	3.22	0.86	3.50	3.16	0.93	3.38	3.09	1.01	3.25	3.02	1.10	3.00	2.83	1.19	2.79	2.69	1.31
293	16°C	21°C	3.09	2.28	0.84	2.98	2.22	0.91	2.87	2.16	0.98	2.75	2.10	1.06	2.52	1.96	1.16	2.33	1.84	1.27
		24°C	3.10	2.77	0.84	2.99	2.70	0.91	2.88	2.64	0.98	2.76	2.57	1.07	2.54	2.40	1.16	2.34	2.26	1.27
		27°C	3.14	3.14	0.84	3.03	3.03	0.91	2.93	2.93	0.99	2.82	2.82	1.07	2.61	2.61	1.16	2.43	2.43	1.28
		30°C	3.27	3.27	0.85	3.17	3.17	0.92	3.08	3.08	0.99	2.98	2.98	1.08	2.76	2.76	1.17	2.58	2.58	1.30
	19°C	24°C	3.40	2.16	0.85	3.28	2.10	0.92	3.16	2.05	1.00	3.03	1.99	1.08	2.79	1.86	1.18	2.57	1.75	1.30
		27°C	3.41	2.48	0.85	3.29	2.43	0.92	3.17	2.37	1.00	3.04	2.32	1.08	2.79	2.17	1.18	2.58	2.05	1.30
		30°C	3.43	3.06	0.85	3.31	3.00	0.92	3.19	2.93	1.00	3.07	2.86	1.09	2.82	2.67	1.18	2.62	2.53	1.30
		33°C	3.48	3.48	0.86	3.38	3.38	0.93	3.27	3.27	1.01	3.16	3.16	1.09	2.93	2.93	1.19	2.74	2.74	1.31
	22°C	27°C	3.74	2.11	0.87	3.61	2.06	0.94	3.47	2.01	1.02	3.34	1.96	1.11	3.07	1.82	1.20	2.84	1.72	1.32
		30°C	3.75	2.59	0.87	3.61	2.54	0.94	3.48	2.48	1.02	3.34	2.42	1.11	3.07	2.27	1.20	2.84	2.15	1.32
		33°C	3.75	3.04	0.87	3.62	2.98	0.94	3.49	2.92	1.02	3.35	2.85	1.11	3.08	2.68	1.20	2.86	2.54	1.32
		36°C	3.77	3.43	0.87	3.65	3.37	0.94	3.53	3.30	1.02	3.40	3.22	1.11	3.13	3.01	1.20	2.92	2.84	1.33
346	16°C	21°C	3.20	2.38	0.85	3.09	2.32	0.91	2.97	2.26	0.99	2.85	2.19	1.07	2.61	2.04	1.16	2.41	1.92	1.28
		24°C	3.22	2.89	0.85	3.10	2.82	0.92	2.99	2.75	0.99	2.87	2.68	1.08	2.63	2.50	1.17	2.43	2.36	1.29
		27°C	3.27	3.27	0.85	3.17	3.17	0.92	3.06	3.06	1.00	2.95	2.95	1.08	2.73	2.73	1.17	2.54	2.54	1.29
		30°C	3.44	3.44	0.86	3.34	3.34	0.93	3.23	3.23	1.01	3.13	3.13	1.09	2.90	2.90	1.19	2.70	2.70	1.31
	19°C	24°C	3.53	2.28	0.86	3.40	2.22	0.93	3.27	2.17	1.01	3.14	2.11	1.09	2.88	1.97	1.19	2.66	1.85	1.31
		27°C	3.54	2.64	0.86	3.41	2.58	0.93	3.28	2.52	1.01	3.15	2.46	1.09	2.89	2.30	1.19	2.67	2.17	1.31
		30°C	3.57	3.25	0.86	3.44	3.18	0.93	3.32	3.10	1.01	3.19	3.03	1.10	2.94	2.83	1.19	2.73	2.66	1.31
		33°C	3.64	3.64	0.87	3.54	3.54	0.94	3.43	3.43	1.02	3.32	3.32	1.11	3.07	3.07	1.20	2.87	2.87	1.33
	22°C	27°C	3.87	2.23	0.88	3.73	2.18	0.95	3.59	2.13	1.03	3.45	2.07	1.11	3.17	1.93	1.21	2.93	1.83	1.33
		30°C	3.88	2.75	0.88	3.74	2.70	0.95	3.60	2.64	1.03	3.46	2.58	1.12	3.17	2.42	1.21	2.94	2.29	1.33
		33°C	3.89	3.22	0.88	3.76	3.17	0.95	3.62	3.10	1.03	3.48	3.03	1.12	3.20	2.84	1.21	2.96	2.70	1.33
		36°C	3.93	3.64	0.88	3.80	3.57	0.95	3.67	3.50	1.03	3.54	3.41	1.12	3.27	3.18	1.22	3.05	2.99	1.34

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Part Number : 0652101C1515

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: M5WM15JR - M5LC15CRJ
Heating Mode

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	2.043	2.043	2.312	2.312	2.402	2.402	3.389	3.389	3.928	3.928	4.197	4.197	4.467	4.467
17	1.989	1.989	2.255	2.255	2.347	2.347	3.385	3.385	3.869	3.869	4.137	4.137	4.406	4.406
19	1.936	1.936	2.197	2.197	2.293	2.293	3.381	3.381	3.810	3.810	4.078	4.078	4.345	4.345
21	1.882	1.882	2.143	2.143	2.238	2.238	3.331	3.331	3.751	3.751	4.018	4.018	4.285	4.285
23	1.829	1.829	2.091	2.091	2.184	2.184	3.236	3.236	3.692	3.692	3.958	3.958	4.224	4.224
25	1.775	1.775	2.038	2.038	2.129	2.129	3.140	3.140	3.633	3.633	3.898	3.898	4.164	4.164
27	1.722	1.722	1.986	1.986	2.074	2.074	3.045	3.045	3.574	3.574	3.839	3.839	4.103	4.103
	FROST REGION													

Part Number : 0652102C1515

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: M5WM20J - M5LC20CJ
Cooling Mode

AFR (CFM)"	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
424	16°C	21°C	4.95	3.55	1.24	4.78	3.46	1.34	4.60	3.36	1.46	4.41	3.27	1.58	4.05	3.04	1.71	3.74	2.86	1.89
		24°C	4.96	4.25	1.24	4.78	4.15	1.34	4.60	4.06	1.46	4.42	3.96	1.58	4.06	3.69	1.71	3.76	3.49	1.89
		27°C	5.00	4.82	1.24	4.83	4.71	1.35	4.66	4.60	1.46	4.48	4.48	1.58	4.14	4.14	1.72	3.85	3.85	1.89
		30°C	5.15	5.15	1.25	5.00	5.00	1.35	4.85	4.85	1.47	4.69	4.69	1.59	4.35	4.35	1.73	4.07	4.07	1.91
	19°C	24°C	5.46	3.31	1.26	5.27	3.23	1.37	5.08	3.14	1.48	4.87	3.06	1.61	4.48	2.85	1.74	4.14	2.68	1.92
		27°C	5.46	3.79	1.26	5.27	3.71	1.37	5.08	3.62	1.48	4.88	3.53	1.61	4.48	3.31	1.74	4.15	3.13	1.92
		30°C	5.47	4.68	1.26	5.28	4.58	1.37	5.10	4.48	1.48	4.90	4.37	1.61	4.52	4.09	1.74	4.19	3.87	1.92
		33°C	5.54	5.54	1.27	5.36	5.36	1.37	5.18	5.18	1.49	5.01	5.01	1.61	4.63	4.63	1.75	4.33	4.33	1.94
	22°C	27°C	6.01	3.24	1.28	5.80	3.17	1.39	5.59	3.09	1.51	5.37	3.00	1.64	4.94	2.80	1.78	4.57	2.64	1.96
		30°C	6.01	3.95	1.28	5.80	3.87	1.39	5.59	3.78	1.51	5.37	3.69	1.64	4.94	3.46	1.78	4.57	3.28	1.96
		33°C	6.01	4.62	1.29	5.80	4.53	1.39	5.59	4.44	1.51	5.37	4.35	1.64	4.95	4.08	1.78	4.58	3.88	1.96
		36°C	6.03	5.24	1.29	5.83	5.13	1.39	5.63	5.02	1.51	5.43	4.91	1.64	5.00	4.61	1.78	4.65	4.37	1.96
478	16°C	21°C	5.15	3.70	1.25	4.96	3.61	1.36	4.78	3.51	1.47	4.58	3.41	1.59	4.20	3.18	1.73	3.88	2.99	1.90
		24°C	5.17	4.49	1.25	4.98	4.39	1.36	4.79	4.28	1.47	4.60	4.18	1.59	4.23	3.90	1.73	3.91	3.68	1.90
		27°C	5.23	5.10	1.26	5.05	4.98	1.36	4.88	4.86	1.47	4.70	4.70	1.60	4.34	4.34	1.74	4.05	4.05	1.92
		30°C	5.45	5.45	1.27	5.29	5.29	1.37	5.13	5.13	1.49	4.96	4.96	1.61	4.60	4.60	1.75	4.30	4.30	1.94
	19°C	24°C	5.67	3.50	1.27	5.47	3.41	1.38	5.27	3.32	1.49	5.06	3.23	1.62	4.64	3.01	1.76	4.29	2.84	1.94
		27°C	5.68	4.03	1.27	5.48	3.94	1.38	5.28	3.86	1.49	5.06	3.76	1.62	4.65	3.52	1.76	4.30	3.33	1.94
		30°C	5.71	4.98	1.28	5.51	4.87	1.38	5.32	4.76	1.50	5.11	4.64	1.62	4.71	4.34	1.76	4.37	4.10	1.94
		33°C	5.81	5.81	1.28	5.63	5.63	1.39	5.45	5.45	1.50	5.27	5.27	1.63	4.88	4.88	1.77	4.56	4.56	1.96
	22°C	27°C	6.23	3.43	1.30	6.02	3.35	1.41	5.79	3.26	1.52	5.56	3.18	1.65	5.11	2.96	1.79	4.73	2.79	1.97
		30°C	6.24	4.21	1.30	6.02	4.12	1.41	5.80	4.03	1.52	5.57	3.93	1.65	5.12	3.68	1.79	4.73	3.50	1.97
		33°C	6.25	4.93	1.30	6.04	4.84	1.41	5.81	4.74	1.53	5.59	4.64	1.65	5.14	4.35	1.79	4.76	4.13	1.98
		36°C	6.29	5.57	1.30	6.09	5.47	1.41	5.88	5.35	1.53	5.66	5.23	1.66	5.22	4.89	1.80	4.87	4.62	1.99
536	16°C	21°C	5.34	3.86	1.26	5.15	3.76	1.37	4.95	3.67	1.48	4.74	3.56	1.60	4.35	3.32	1.74	4.01	3.12	1.92
		24°C	5.37	4.69	1.27	5.17	4.58	1.37	4.98	4.47	1.48	4.78	4.35	1.61	4.39	4.06	1.74	4.05	3.83	1.92
		27°C	5.46	5.38	1.27	5.28	5.24	1.37	5.10	5.09	1.49	4.92	4.92	1.61	4.54	4.54	1.75	4.23	4.23	1.94
		30°C	5.73	5.73	1.28	5.56	5.56	1.39	5.39	5.39	1.50	5.21	5.21	1.63	4.83	4.83	1.77	4.51	4.51	1.96
	19°C	24°C	5.88	3.70	1.28	5.67	3.61	1.39	5.45	3.52	1.51	5.23	3.43	1.63	4.80	3.19	1.77	4.43	3.01	1.95
		27°C	5.90	4.29	1.29	5.68	4.19	1.39	5.47	4.09	1.51	5.25	3.99	1.64	4.82	3.73	1.77	4.46	3.53	1.95
		30°C	5.94	5.27	1.29	5.73	5.16	1.39	5.53	5.04	1.51	5.32	4.92	1.64	4.90	4.59	1.78	4.54	4.33	1.96
		33°C	6.07	6.07	1.29	5.90	5.90	1.40	5.71	5.71	1.52	5.53	5.53	1.65	5.12	5.12	1.80	4.79	4.79	1.98
	22°C	27°C	6.45	3.62	1.31	6.22	3.54	1.42	5.99	3.46	1.54	5.75	3.36	1.67	5.28	3.14	1.81	4.88	2.96	1.99
		30°C	6.46	4.47	1.31	6.23	4.38	1.42	6.00	4.29	1.54	5.76	4.19	1.67	5.29	3.92	1.81	4.89	3.72	1.99
		33°C	6.49	5.24	1.31	6.26	5.14	1.42	6.03	5.04	1.54	5.79	4.93	1.67	5.33	4.62	1.81	4.94	4.38	2.00
		36°C	6.54	5.91	1.31	6.34	5.80	1.42	6.12	5.68	1.54	5.90	5.54	1.68	5.45	5.16	1.82	5.09	4.86	2.01
570	16°C	21°C	5.34	3.90	1.28	5.15	3.80	1.37	4.96	3.71	1.49	4.77	3.61	1.61	4.38	3.36	1.76	4.05	3.17	1.96
		24°C	5.36	4.76	1.28	5.17	4.66	1.37	4.98	4.56	1.49	4.79	4.45	1.62	4.40	4.16	1.76	4.08	3.93	1.96
		27°C	5.45	5.45	1.28	5.28	5.28	1.38	5.11	5.11	1.49	4.94	4.94	1.62	4.58	4.58	1.77	4.28	4.28	1.97
		30°C	5.74	5.74	1.29	5.58	5.58	1.39	5.42	5.42	1.51	5.25	5.25	1.64	4.87	4.87	1.79	4.56	4.56	1.99
	19°C	24°C	5.88	3.74	1.30	5.67	3.65	1.40	5.47	3.56	1.51	5.26	3.47	1.64	4.84	3.24	1.79	4.48	3.06	1.98
		27°C	5.89	4.33	1.30	5.69	4.24	1.40	5.48	4.15	1.51	5.27	4.06	1.64	4.85	3.81	1.79	4.49	3.61	1.99
		30°C	5.92	5.38	1.30	5.72	5.27	1.40	5.53	5.15	1.51	5.33	5.03	1.64	4.92	4.70	1.79	4.59	4.43	1.99
		33°C	6.08	6.08	1.31	5.90	5.90	1.41	5.74	5.74	1.53	5.57	5.57	1.66	5.17	5.17	1.81	4.85	4.85	2.01
	22°C	27°C	6.46	3.66	1.32	6.24	3.58	1.42	6.02	3.50	1.54	5.79	3.41	1.67	5.33	3.19	1.82	4.94	3.02	2.02
		30°C	6.47	4.53	1.32	6.25	4.44	1.42	6.03	4.35	1.54	5.80	4.25	1.67	5.34	3.99	1.82	4.95	3.79	2.02
		33°C	6.49	5.34	1.32	6.26	5.24	1.43	6.04	5.15	1.54	5.82	5.05	1.67	5.36	4.74	1.82	4.98	4.51	2.02
		36°C	6.55	6.05	1.33	6.34	5.93	1.43	6.14	5.81	1.55	5.94	5.66	1.68	5.50	5.29	1.83	5.14	5.00	2.03

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: M5WM20JR - M5LC20CRJ
Heating Mode

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	Q (kW)	SC (kW)	Q (kW)	SC (kW)	Q (kW)	SC (kW)	Q (kW)	SC (kW)	Q (kW)	SC (kW)	Q (kW)	SC (kW)	Q (kW)	SC (kW)
15	3.189	3.189	3.610	3.610	3.750	3.750	5.291	5.291	6.132	6.132	6.553	6.553	6.973	6.973
17	3.106	3.106	3.291	3.291	3.664	3.664	5.285	5.285	6.038	6.038	6.457	6.457	6.876	6.876
19	3.022	3.022	2.973	2.973	3.578	3.578	5.279	5.279	5.944	5.944	6.361	6.361	6.778	6.778
21	2.938	2.938	2.854	2.854	3.493	3.493	5.200	5.200	5.849	5.849	6.265	6.265	6.681	6.681
23	2.855	2.855	2.936	2.936	3.407	3.407	5.048	5.048	5.755	5.755	6.169	6.169	6.584	6.584
25	2.771	2.771	3.017	3.017	3.322	3.322	4.896	4.896	5.661	5.661	6.074	6.074	6.487	6.487
27	2.688	2.688	3.099	3.099	3.236	3.236	4.744	4.744	5.567	5.567	5.978	5.978	6.389	6.389

Part Number : 0652102C2020

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: M5WM25J - M5LC25CJ
Cooling Mode

AFR (CFM)"	EWB	EDB	Outdoor temperature																	
			19°C			25°C			30°C			35°C			40°C			46°C		
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
474	16°C	21°C	5.67	3.96	1.42	5.47	3.85	1.54	5.26	3.75	1.66	5.05	3.64	1.80	4.64	3.39	1.96	4.28	3.19	2.16
		24°C	5.67	4.74	1.42	5.47	4.63	1.54	5.27	4.52	1.66	5.06	4.41	1.81	4.65	4.12	1.96	4.30	3.89	2.16
		27°C	5.72	5.37	1.42	5.53	5.25	1.54	5.33	5.13	1.67	5.13	4.99	1.81	4.74	4.65	1.96	4.41	4.36	2.17
		30°C	5.90	5.90	1.43	5.73	5.73	1.55	5.55	5.55	1.68	5.37	5.37	1.82	4.98	4.98	1.98	4.66	4.66	2.19
	19°C	24°C	6.25	3.69	1.44	6.03	3.60	1.56	5.81	3.50	1.69	5.58	3.41	1.84	5.13	3.17	1.99	4.74	2.99	2.20
		27°C	6.26	4.23	1.44	6.03	4.13	1.56	5.81	4.04	1.69	5.58	3.94	1.84	5.13	3.68	1.99	4.75	3.49	2.20
		30°C	6.26	5.22	1.44	6.05	5.10	1.56	5.83	4.99	1.69	5.61	4.87	1.84	5.17	4.56	1.99	4.79	4.31	2.20
		33°C	6.34	6.34	1.45	6.13	6.13	1.57	5.93	5.93	1.70	5.73	5.73	1.85	5.30	5.30	2.00	4.96	4.96	2.21
	22°C	27°C	6.88	3.62	1.47	6.64	3.53	1.59	6.40	3.44	1.73	6.15	3.34	1.87	5.65	3.12	2.03	5.23	2.94	2.24
		30°C	6.88	4.41	1.47	6.64	4.31	1.59	6.40	4.21	1.73	6.15	4.11	1.87	5.65	3.85	2.03	5.23	3.65	2.24
		33°C	6.88	5.15	1.47	6.64	5.05	1.59	6.40	4.95	1.73	6.15	4.85	1.87	5.66	4.55	2.03	5.25	4.32	2.24
		36°C	6.91	5.83	1.47	6.68	5.72	1.59	6.45	5.60	1.73	6.21	5.48	1.88	5.73	5.13	2.04	5.33	4.87	2.24
537	16°C	21°C	5.90	4.13	1.43	5.68	4.02	1.55	5.47	3.91	1.68	5.24	3.80	1.82	4.81	3.54	1.97	4.44	3.33	2.18
		24°C	5.91	5.01	1.43	5.70	4.89	1.55	5.49	4.77	1.68	5.27	4.65	1.82	4.84	4.34	1.98	4.47	4.10	2.18
		27°C	5.98	5.69	1.44	5.78	5.56	1.56	5.58	5.41	1.69	5.38	5.25	1.83	4.97	4.88	1.99	4.63	4.56	2.19
		30°C	6.23	6.23	1.45	6.05	6.05	1.57	5.87	5.87	1.70	5.68	5.68	1.85	5.26	5.26	2.01	4.92	4.92	2.21
	19°C	24°C	6.50	3.90	1.46	6.26	3.81	1.58	6.03	3.71	1.71	5.79	3.60	1.85	5.31	3.36	2.01	4.91	3.17	2.21
		27°C	6.51	4.50	1.46	6.27	4.40	1.58	6.04	4.30	1.71	5.80	4.19	1.85	5.33	3.92	2.01	4.92	3.71	2.22
		30°C	6.54	5.55	1.46	6.31	5.43	1.58	6.08	5.30	1.71	5.85	5.17	1.86	5.39	4.84	2.01	5.00	4.57	2.22
		33°C	6.65	6.65	1.46	6.44	6.44	1.59	6.24	6.24	1.72	6.03	6.03	1.87	5.59	5.59	2.03	5.22	5.22	2.24
	22°C	27°C	7.14	3.82	1.48	6.89	3.73	1.61	6.63	3.64	1.74	6.37	3.54	1.89	5.85	3.30	2.05	5.41	3.11	2.26
		30°C	7.15	4.69	1.48	6.89	4.59	1.61	6.64	4.49	1.74	6.37	4.39	1.89	5.86	4.11	2.05	5.42	3.90	2.26
		33°C	7.16	5.49	1.48	6.91	5.39	1.61	6.66	5.28	1.74	6.39	5.17	1.89	5.88	4.85	2.05	5.45	4.60	2.26
		36°C	7.20	6.21	1.49	6.97	6.09	1.61	6.73	5.97	1.75	6.48	5.83	1.90	5.98	5.45	2.06	5.58	5.15	2.27
614	16°C	21°C	6.11	4.31	1.45	5.89	4.20	1.56	5.66	4.09	1.69	5.43	3.97	1.83	4.98	3.70	1.99	4.59	3.48	2.19
		24°C	6.15	5.23	1.45	5.92	5.11	1.57	5.70	4.98	1.70	5.47	4.85	1.84	5.02	4.53	1.99	4.64	4.27	2.20
		27°C	6.25	5.99	1.45	6.04	5.84	1.57	5.84	5.68	1.70	5.63	5.50	1.85	5.20	5.10	2.01	4.85	4.76	2.21
		30°C	6.56	6.56	1.46	6.37	6.37	1.59	6.17	6.17	1.72	5.97	5.97	1.87	5.53	5.53	2.03	5.16	5.16	2.24
	19°C	24°C	6.73	4.13	1.47	6.49	4.03	1.59	6.24	3.92	1.72	5.99	3.82	1.87	5.49	3.56	2.03	5.07	3.36	2.23
		27°C	6.75	4.78	1.47	6.51	4.67	1.59	6.26	4.56	1.72	6.01	4.45	1.87	5.52	4.16	2.03	5.10	3.93	2.23
		30°C	6.81	5.88	1.47	6.56	5.75	1.59	6.33	5.62	1.73	6.09	5.48	1.87	5.60	5.12	2.03	5.20	4.82	2.24
		33°C	6.95	6.95	1.48	6.75	6.75	1.60	6.54	6.54	1.74	6.33	6.33	1.89	5.86	5.86	2.05	5.48	5.48	2.27
	22°C	27°C	7.38	4.04	1.50	7.12	3.95	1.62	6.85	3.85	1.76	6.58	3.75	1.91	6.04	3.50	2.07	5.58	3.30	2.28
		30°C	7.40	4.98	1.50	7.14	4.89	1.62	6.87	4.78	1.76	6.59	4.67	1.91	6.06	4.37	2.07	5.60	4.15	2.28
		33°C	7.43	5.84	1.50	7.17	5.73	1.62	6.91	5.61	1.76	6.63	5.49	1.91	6.10	5.15	2.07	5.65	4.88	2.28
		36°C	7.49	6.59	1.50	7.26	6.47	1.63	7.01	6.33	1.77	6.75	6.17	1.92	6.24	5.76	2.08	5.82	5.42	2.30
641	16°C	21°C	6.11	4.34	1.46	5.90	4.24	1.57	5.68	4.13	1.70	5.46	4.02	1.85	5.02	3.75	2.01	4.63	3.53	2.24
		24°C	6.13	5.31	1.46	5.91	5.19	1.57	5.70	5.08	1.70	5.48	4.96	1.85	5.04	4.64	2.01	4.67	4.38	2.24
		27°C	6.23	6.09	1.46	6.04	5.93	1.58	5.85	5.78	1.71	5.65	5.61	1.86	5.24	5.24	2.03	4.89	4.89	2.25
		30°C	6.57	6.57	1.48	6.39	6.39	1.59	6.20	6.20	1.73	6.01	6.01	1.88	5.57	5.57	2.05	5.22	5.22	2.28
	19°C	24°C	6.73	4.16	1.48	6.49	4.06	1.60	6.26	3.97	1.73	6.02	3.87	1.88	5.54	3.61	2.04	5.12	3.41	2.27
		27°C	6.75	4.83	1.48	6.51	4.73	1.60	6.28	4.63	1.73	6.04	4.53	1.88	5.55	4.24	2.05	5.14	4.03	2.27
		30°C	6.78	6.00	1.49	6.55	5.87	1.60	6.33	5.75	1.73	6.10	5.61	1.88	5.63	5.24	2.05	5.25	4.94	2.28
		33°C	6.96	6.96	1.49	6.76	6.76	1.61	6.57	6.57	1.74	6.37	6.37	1.90	5.92	5.92	2.07	5.55	5.55	2.30
	22°C	27°C	7.39	4.08	1.51	7.14	3.99	1.63	6.89	3.90	1.76	6.63	3.80	1.91	6.10	3.55	2.08	5.66	3.36	2.31
		30°C	7.41	5.05	1.51	7.15	4.95	1.63	6.90	4.84	1.76	6.64	4.74	1.91	6.12	4.45	2.08	5.67	4.23	2.31
		33°C	7.43	5.95	1.51	7.17	5.84	1.63	6.92	5.74	1.76	6.66	5.63	1.91	6.14	5.29	2.08	5.71	5.02	2.31
		36°C	7.50	6.74	1.52	7.26	6.61	1.63	7.02	6.47	1.77	6.80	6.31	1.92	6.29	5.90	2.09	5.89	5.57	2.32

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

Model: M5WM25JR - M5LC25CRJ
Heating Mode

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	Q (kW)	SC (kW)	Q (kW)	SC (kW)	Q (kW)	SC (kW)	Q (kW)	SC (kW)	Q (kW)	SC (kW)	Q (kW)	SC (kW)	Q (kW)	SC (kW)
15	3z.721	3.721	4.211	4.211	4.375	4.375	6.173	6.173	7.154	7.154	7.645	7.645	8.135	8.135
17	3.623	3.623	3.734	3.734	4.282	4.282	6.166	6.166	7.081	7.081	7.575	7.575	8.069	8.069
19	3.526	3.526	3.257	3.257	4.189	4.189	6.158	6.158	7.008	7.008	7.505	7.505	8.003	8.003
21	3.428	3.428	3.108	3.108	4.096	4.096	6.089	6.089	6.934	6.934	7.435	7.435	7.936	7.936
23	3.331	3.331	3.288	3.288	4.003	4.003	5.956	5.956	6.861	6.861	7.366	7.366	7.870	7.870
25	3.233	3.233	3.467	3.467	3.910	3.910	5.824	5.824	6.788	6.788	7.296	7.296	7.804	7.804
27	3.135	3.135	3.647	3.647	3.817	3.817	5.692	5.692	6.715	6.715	7.226	7.226	7.737	7.737

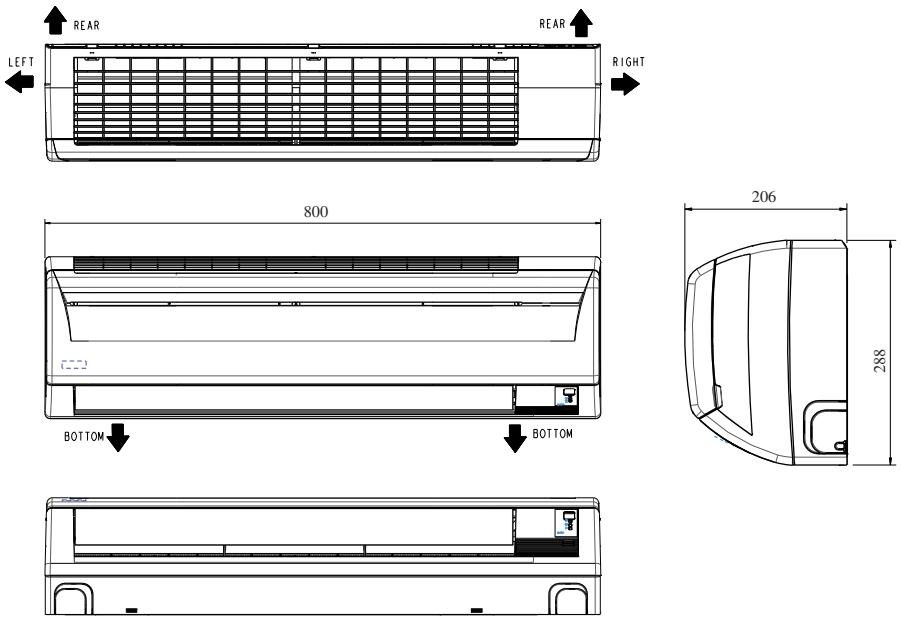
Part Number : 0652102C2525

Remark:
AFR: Air flow rate (CFM)
EWB: Entering Wet Bulb Temp. (°C)
EDB: Entering Dry Bulb Temp. (°C)
TC: Total Cooling Capacity (kW)
SHC: Sensible Heat Capacity (kW)
PI: Power Input

Notes:
1. Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2. shows nominal capacities.
3. Direct interpolation is permissible. Do not extrapolate.
4. Unit is able to operate at ambient from 0 °C to 46°C without pressure trip.

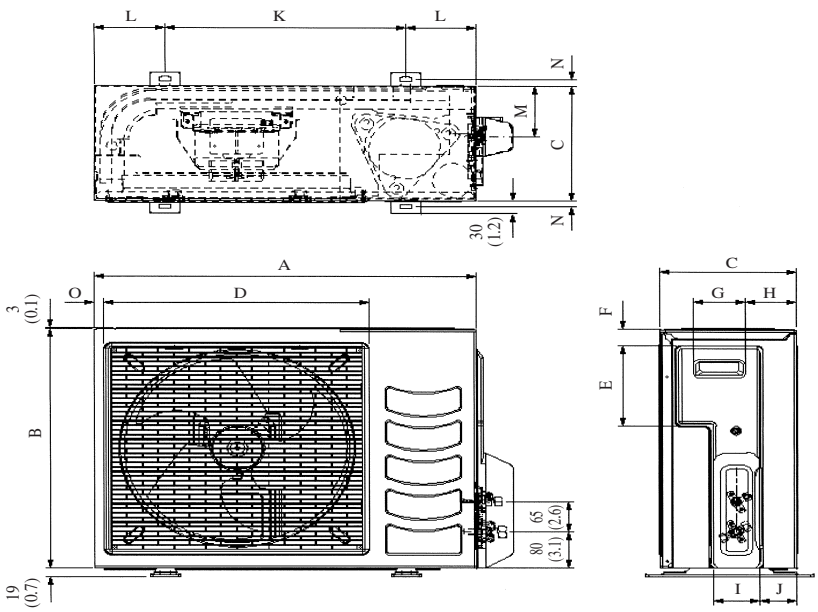
Outline & Dimension

Indoor Unit
Model: MWM09/15J/JR, M5WM10/15J/JR



50123456789	Note: Dimension in mm

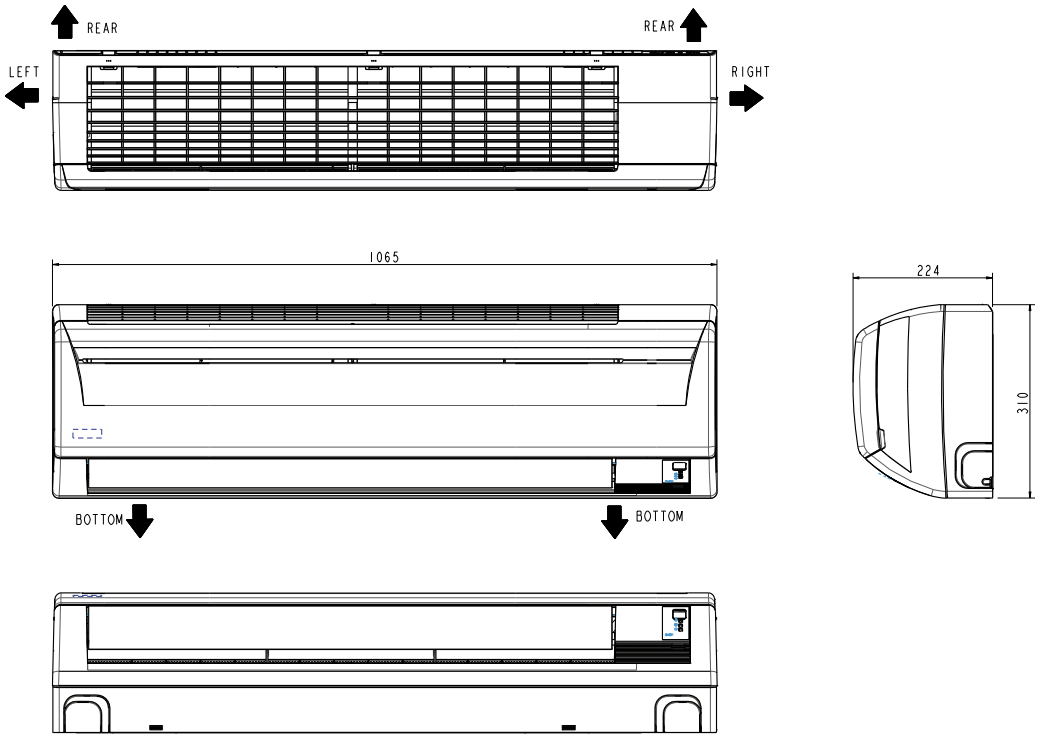
Outdoor Unit
Model: MLC09/15C/CR, M5LC10/15CJ / CRJ



Dimension	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
10 / 15 CJ / CRJ	700 (27.5)	521 (20.5)	250 (9.8)	485 (19.1)	175 (6.8)	36 (1.4)	95 (3.7)	93 (3.6)	86 (3.3)	68 (2.6)	441 (17.3)	130 (5.1)	111 (4.3)	15 (0.5)	18 (0.7)

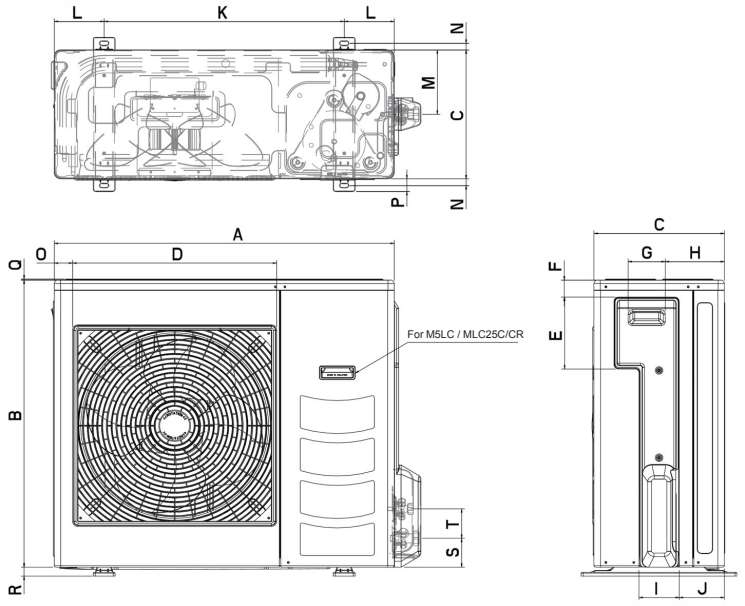
50123456789	Note: Dimension in mm

Indoor Unit
Model: M(5)WM20/25J/JR



Note: Dimension in mm

Outdoor Unit
Model: M(5)LC20/25CJ/CRJ



MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
M(5)LC20CJ/CRJ	855	628	328	508	181	44	93	149	101	113	603	126	164	17	49	32	3	23	73	75
M(5)LC25CJ/CRJ	855	730	328	513	182	44	93	149	101	113	603	126	164	17	47	32	3	23	73	75

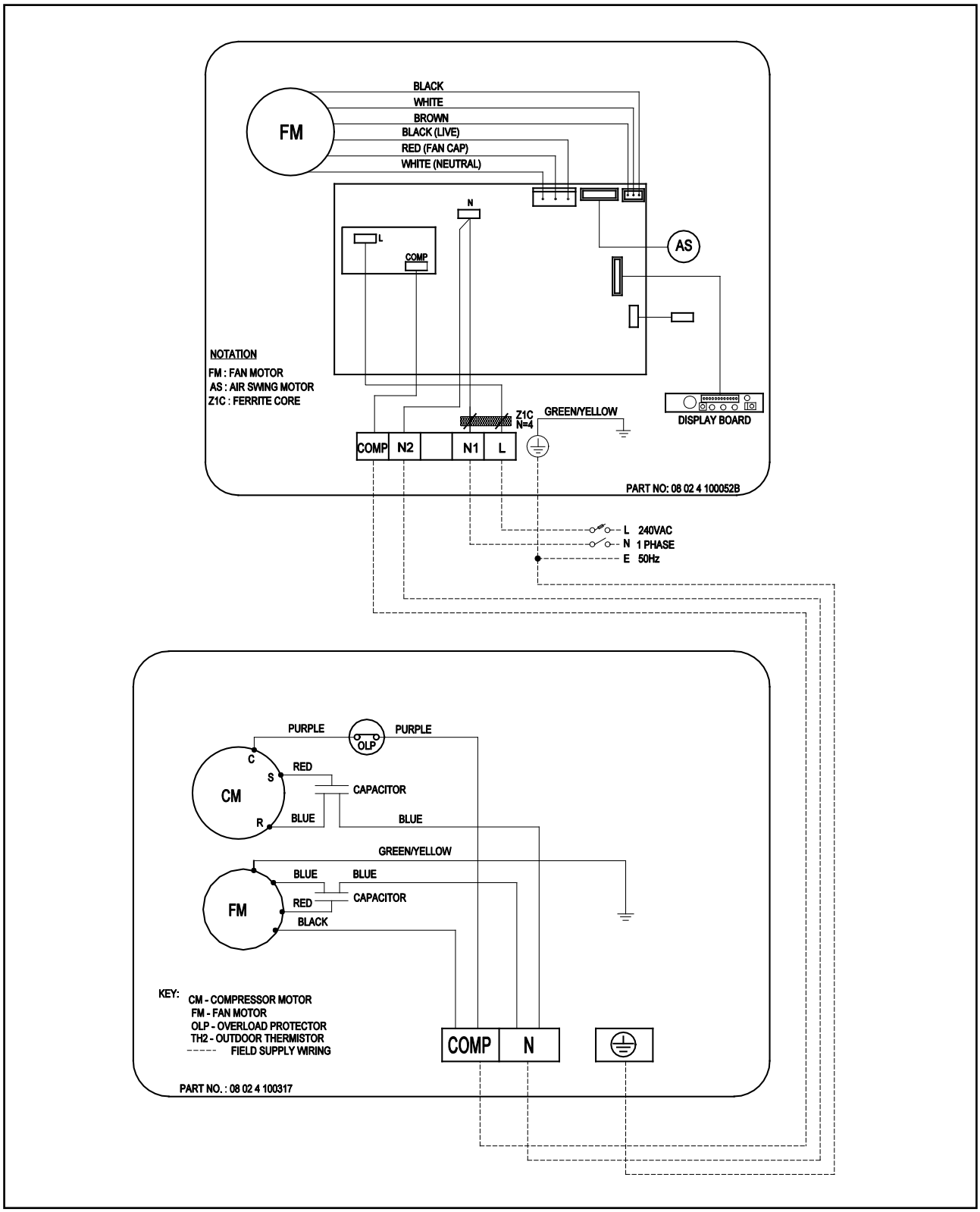
Note: Dimension in mm

Wiring Diagram

Cooling Only

Indoor Unit
Model: MWM09/15J
M5WM10/15J

Outdoor Unit
Model: MLC09/15CJ
M5LC10/15CJ



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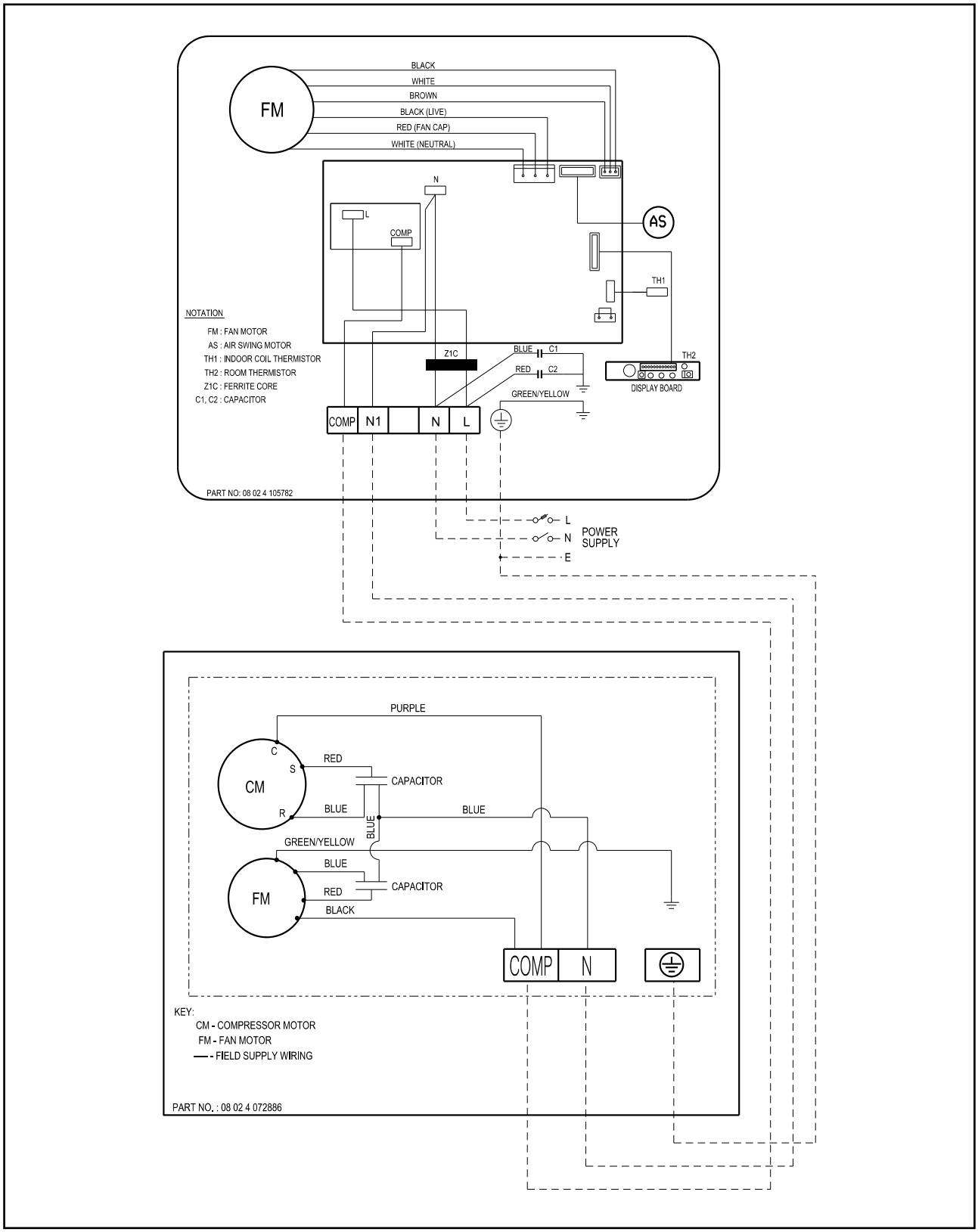
Cooling Only

Indoor Unit
Model: MWM20/25J

Outdoor Unit
Model: MLC20/25C

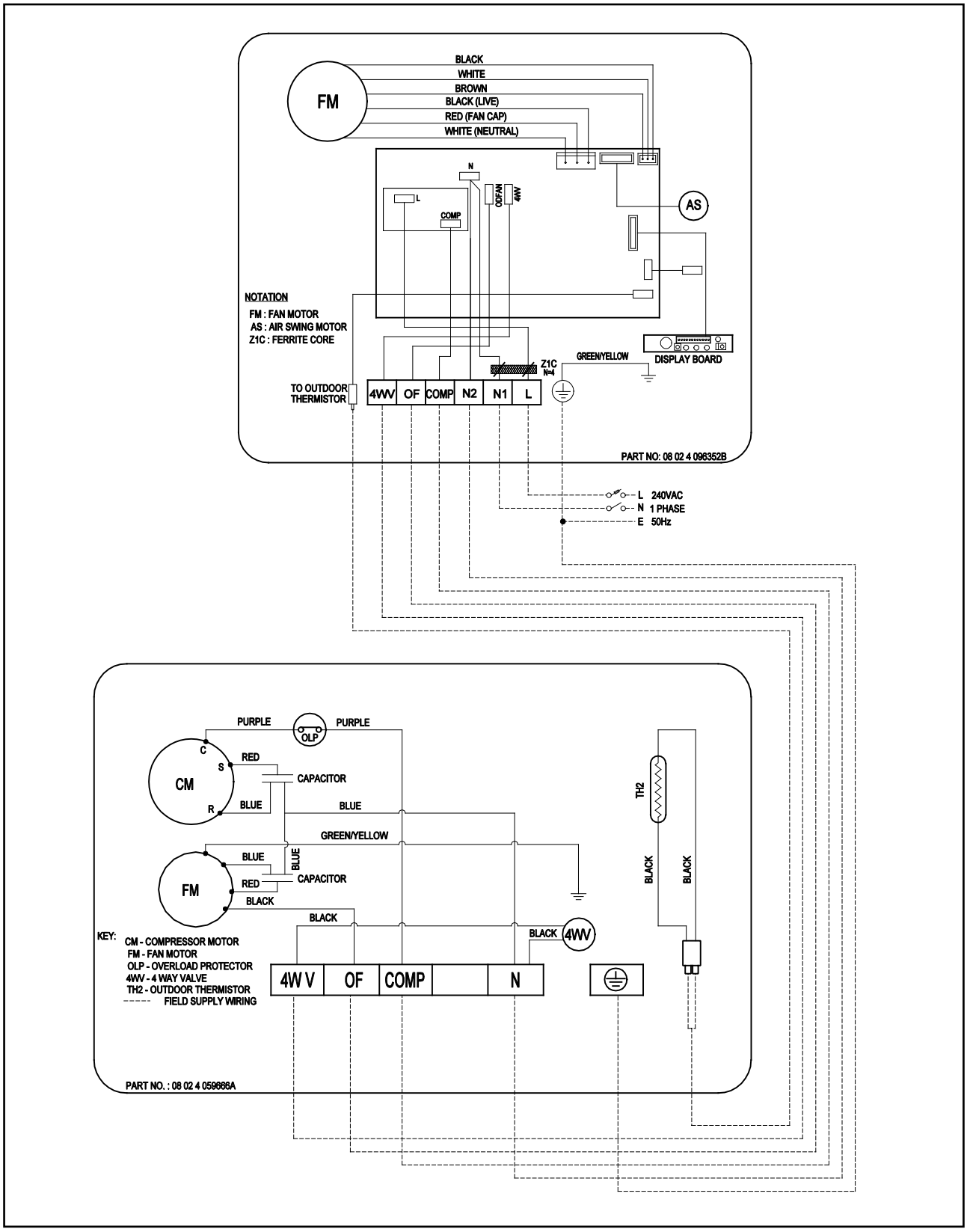


70034 108883

Heat Pump

Indoor Unit
Model: MWM09/15JR
M5WM10/15JR

Outdoor Unit
Model: MLC09/15CRJ
M5LC10/15CRJ



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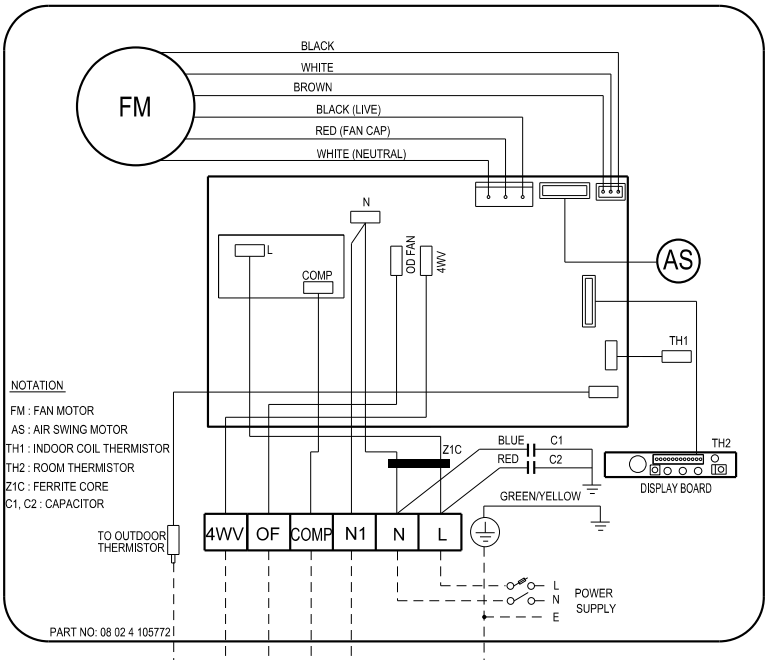
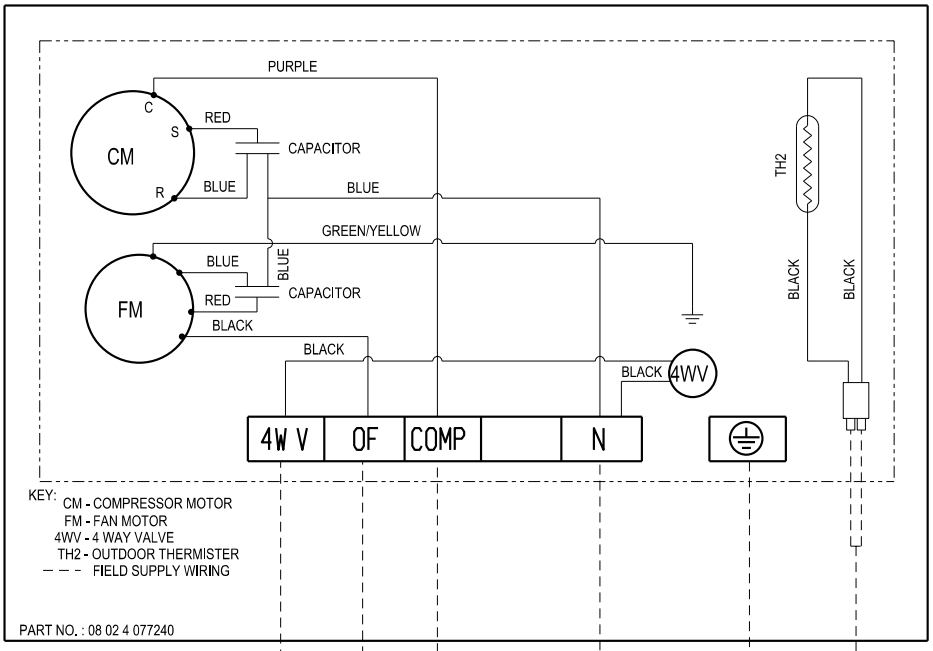
Heat Pump

Indoor Unit
Model: MWM20/25JR

Outdoor Unit
Model: MLC20/25CR





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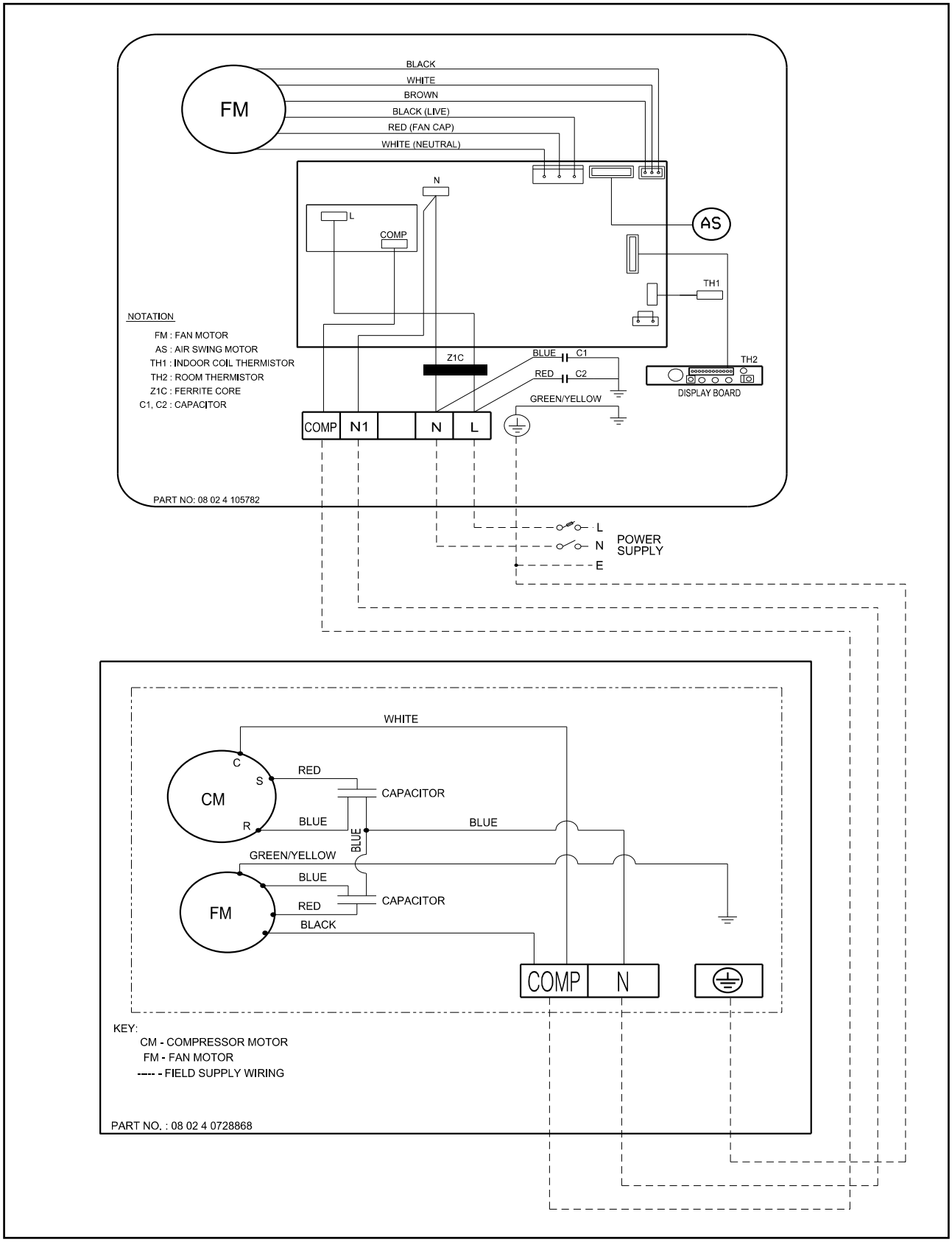
Cooling Only

Indoor Unit
Model: M5WM20/25J

Outdoor Unit
Model: M5LC20/25CJ



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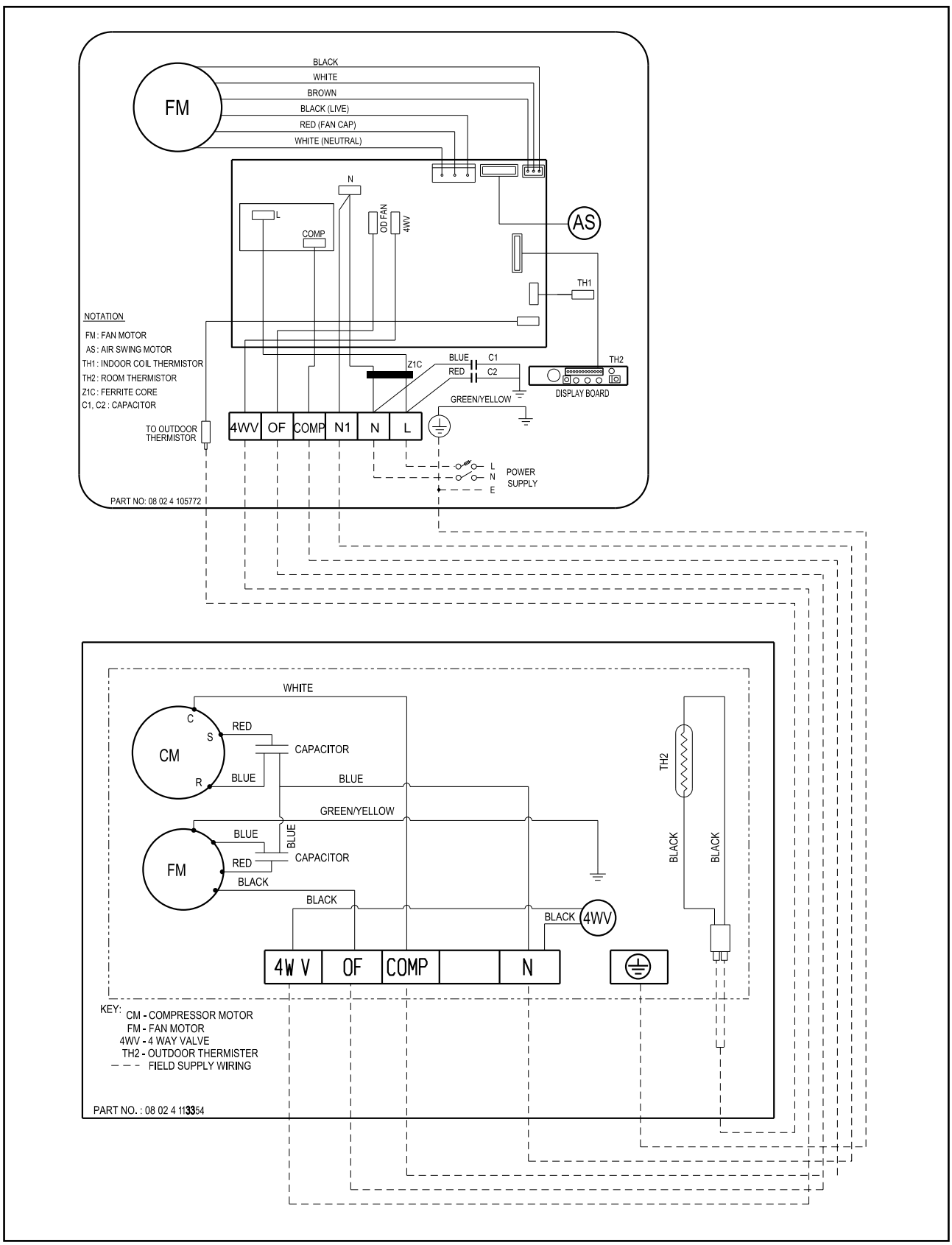
Heat Pump

Indoor Unit
Model: M5WM20/25JR

Outdoor Unit
Model: M5LC20/25CRJ



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Service & Maintenance

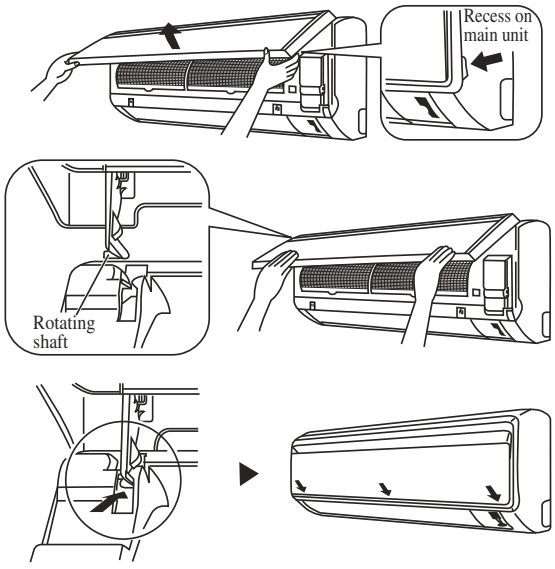
⚠ Warning

- Disconnect from main supply before servicing the air conditioner.
- The unit is designed to give long life operation with minimum maintenance required. However, it should be regularly checked and the following items should be given due attention.

Components	Maintenance Procedures	Period
Air Filter (Indoor Unit)	1. Remove any dust adhering to the filter by using a vacuum cleaner or wash in lukewarm water (below 40˚C) with a neutral cleaning detergent. 2. Rinse the filter well and dry before placing it back onto the unit. 3. Note: Never use gasoline, volatile substances or chemicals to clean the filter.	At least once every 2 weeks. More frequently if necessary.
Indoor Unit	1. Clean any dirt or dust on the grille or panel by wiping it with a soft cloth soaked in lukewarm water (below 40˚C) and a neutral detergent solution. 2. Note: Never use gasoline, volatile substances or chemicals to clean the indoor unit.	At least once every 2 weeks. More frequently if necessary.
Condense Drain Pan & Pipe	1. Check the cleanliness and clean it if necessary. 2. Check the condensate water flow.	Every 3 months.
Indoor Fan	Check if there is any abnormal noise.	If necessary.
Indoor / Outdoor Coil	1. Check and remove the dirt between the fins. 2. Check and remove any obstacles which hinder air flow through the indoor or outdoor.	Every month.
Power Supply	1. Check the running current and voltage for indoor and outdoor unit. 2. Check the electrical wiring and tighten the wire onto the terminal block if necessary.	Every 2 months. Every year.
Compressor	No maintenance needed if refrigerant circuit remains sealed. However, check for refrigerant leak at joint and fitting.	Every 6 months.

Indoor Models

1. Open the front panel
   - Hold the panel at the recesses on the main unit (2 recesses on right and left sides) and lift it until it stops.
2. Remove the front panel
   - While lifting the front panel further, slide it to the right and pull it to the front side. The left rotating shaft is detached. Slide the right rotating shaft to the left and pull it to the front side to remove it.
3. Attach the front panel
   - Align the right and left rotating shafts of the front panel with the grooves and push them all the way in.
   - Gently close the front panel. (Push both ends and the center on the front panel.)



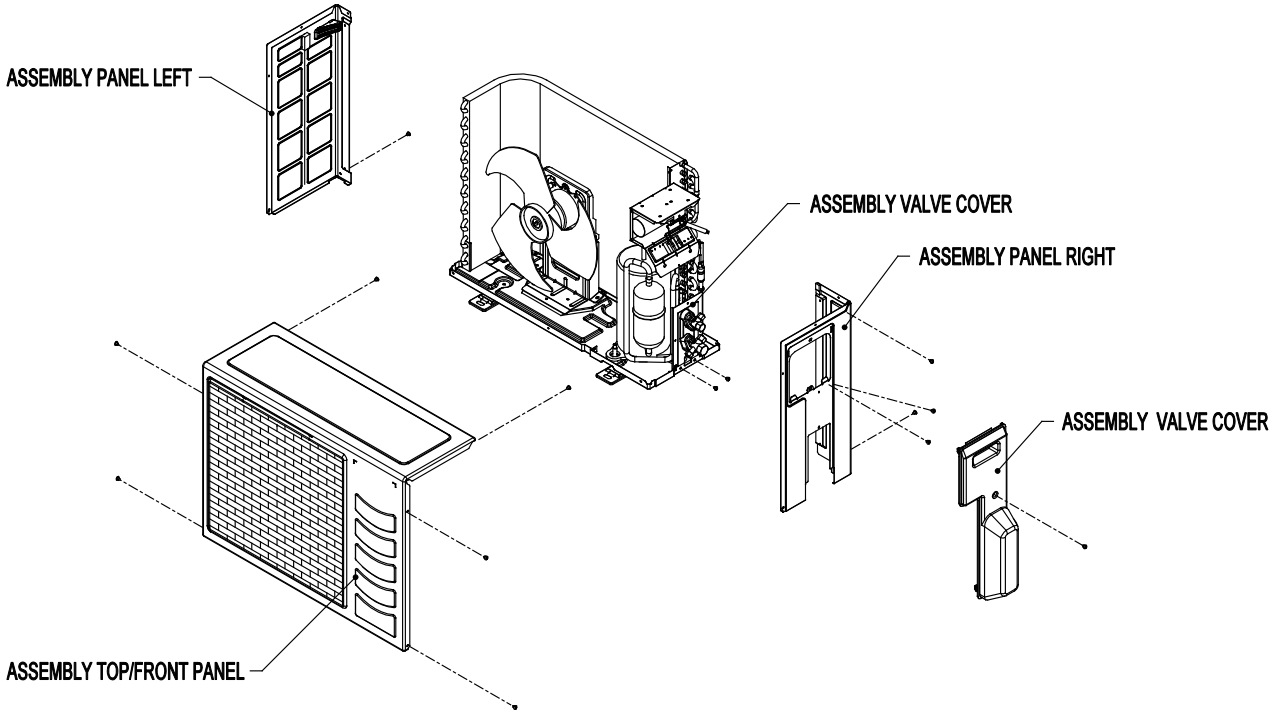
⚠ Caution

- Don't touch the metal parts of the indoor unit. It may cause an injury.
- When removing or attaching the front panel, use a robust and stable stool and watch your steps carefully.
- When removing or attaching the front panel, support the panel securely with hand to prevent from it falling.
- For cleansing, do no use hot water above 40°C, benzene, gasoline, thinner, nor other volatile oils, polishing compound, scrubbing brushes, nor other hand stuff.
- After cleaning, make sure that the front panel is securely fixed.

Pre Start Up Maintenance
(After Extended Shutdown)

- Inspect thoroughly and clean indoor and outdoor units.
- Clean or replace air filters.
- Clean condensates drain line.
- Clean clogged indoor and outdoor coils.
- Check fan imbalance before operation.
- Tighten all wiring connections and panels.
- Check for refrigerant leakage.

Outdoor Models
The design of the A5LC outdoor series allows servicing to be carried out easily. The removal of the top, front and side panels makes almost every part accessible.



Under normal circumstances, these outdoor units only require a check and cleaning of air intake coil surface once every 3 months. However, if a unit is installed in areas subjected to much oil mist and dust, the coils must be regularly cleaned by qualified Air Conditioner Service Technicians to ensure sufficient heat exchange and proper operation. Otherwise, the systems life span may be shortened.

⚠ Caution

- Do not charge OXYGEN, ACETYLENE OR OTHER FLAMMABLE and poisonous gases into the unit when performing a leakage test or an airtight test. These gases could cause severe explosion and damage if exposed to high temperature and pressure.
- It is recommended that only nitrogen or refrigerant be charged when performing the leakage or airtight test.

Troubleshooting

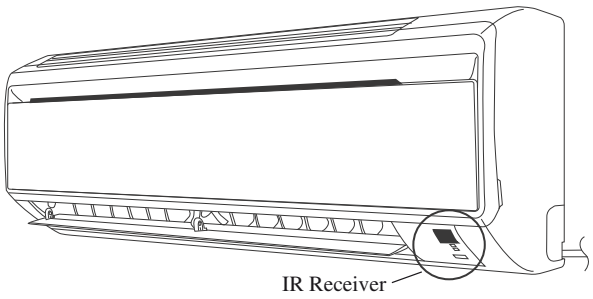
Indicator Lights

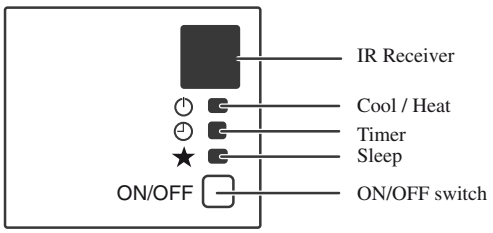
IR Signal Receiver
When an infra red remote control operating signal has been transmitted, the signal receiver on the indoor unit will respond as below to confirm acceptance of the signal transmission.

ON to OFF	1 Long Beep
OFF to ON Pump down/Cool force on	2 Short Beep
Others	1 Short Beep

Cooling Unit / Heat Pump Unit

The table below shows the LED indicator lights for the air conditioner unit under normal operation and fault conditions. The LED lights are located at the middle of the air conditioner unit.
The heat pump units are equipped with an “auto” mode sensor whereby it will provide reasonable room temperature by switching automatically to either “cool” or “heat” mode according to the temperature set by the user.





LED Indoor Lights: Normal Operation and Fault Conditions for Cooling / Heat Pump Unit

★	COOL/HEAT (GREEN/RED)	🕒	Error Code	Normal Operation / Fault Indication	Action
○/●	○ Green		-	Cool mode	-
○/●	○ Red		-	Heat mode	-
○/●	○ Red		-	Auto mode in Heating operation	-
○/●	○ Green		-	Auto mode in Cooling operation	-
	○	○	-	Time on	-
○	○		-	Sleep mode on	-
	○		-	Fan mode on	-
	○		-	Dry mode on	-
	◑ 1 time		Blink E1	Room air sensor contact loose / short	Check room sensor connection / change room air sensor
	◑ 3 times		Blink E3	Outdoor coil sensor open	Check outdoor coil sensor connection / change outdoor coil sensor
	◑ 2 times		Blink E2	Indoor coil sensor open	Check indoor coil sensor connection / change indoor coil sensor
		◑ 1 time	Blink E4	Compressor overload / indoor coil sensor short / outdoor coil sensor short	If running ampere highly increase, change the compressor. If not, replace the coil sensor.
	◑ Red		-	Defrost operation	-
		◑ 3 times	Blink E5	Gas leak	Top up refrigerant / check for leakage
		◑ 6 times	Blink E8	Hardware error (tact switch pin short)	Contact your distributor
●	◑ 4 times		Blink E9	No feedback from indoor fan	Contact your distributor
	◑ 5 times		Blink EE	EEPROM defrost	Contact your distributor

● ON ○/● ON or OFF ◑ Blinking

Note: The unit will not detect sensor missing when the compressor is ON.

Error Code / Fault Condition

When a malfunction of the air conditioner unit is detected, immediately switch off the main power supply before proceeding with the following troubleshooting procedures.
The following are common fault conditions and simple troubleshooting tips. If any other fault conditions which are not listed occur, contact your nearest local dealer. DO NOT attempt to troubleshoot the unit by yourself.

No	Fault conditions	Possible causes / corrective actions
1	The air conditioner unit will not resume after power failure.	• The auto restart function is not functioning. Please turn on the unit with the wireless / wired controller.
2	The compressor does not operate 3 minutes after the air conditioner unit is started.	• Protection against frequent starting. • Wait for 3 or 4 minutes for the compressor to start operating by itself.
3	The airflow is too slow or room cannot be cooled sufficiently.	• The air filter is dirty. • The doors and windows are opened. • The air suction and discharge of both indoor and outdoor units are clogged or blocked. • The regulated temperature or temperature setting is not low enough.
4	Discharge airflow has bad odor.	• Cigarettes, smoke particles, perfume and others, which might have adhered onto the coil, may cause odor. • Contact your nearest dealer.
5	Condensation on the front air grille of the indoor unit.	• This is caused by air humidity after an extended period of operation. • The set temperature is too low. Increase the temperature setting and operate the unit at high fan speed.
6	Water flowing out from the air conditioner.	• Switch off the unit and contact your nearest dealer. This might be due to tilted installation.
7	Hissing airflow sound from the air conditioner unit during operation.	• Liquid refrigerant flowing into the evaporator coil.
8	The wireless controller display is dim.	• The batteries are discharged. • The batteries are not correctly inserted. • The assembly is not good.
9	Compressor operates continuously.	• Dirty air filter. Clean the air filter. • Temperature setting too low (cooling). Use higher temperature setting. • Temperature setting too high (heating). Use lower temperature setting.
10	No cool air comes out during cooling cycle, or no hot air comes out during heating cycle.	• Temperature setting too high (cooling). Use lower temperature setting. • Temperature setting too low (heating). Use higher temperature setting.
11	On heating cycle, warm air does not come out.	• Unit is in defrost mode. Heating operation will resume after defrost cycle ends.

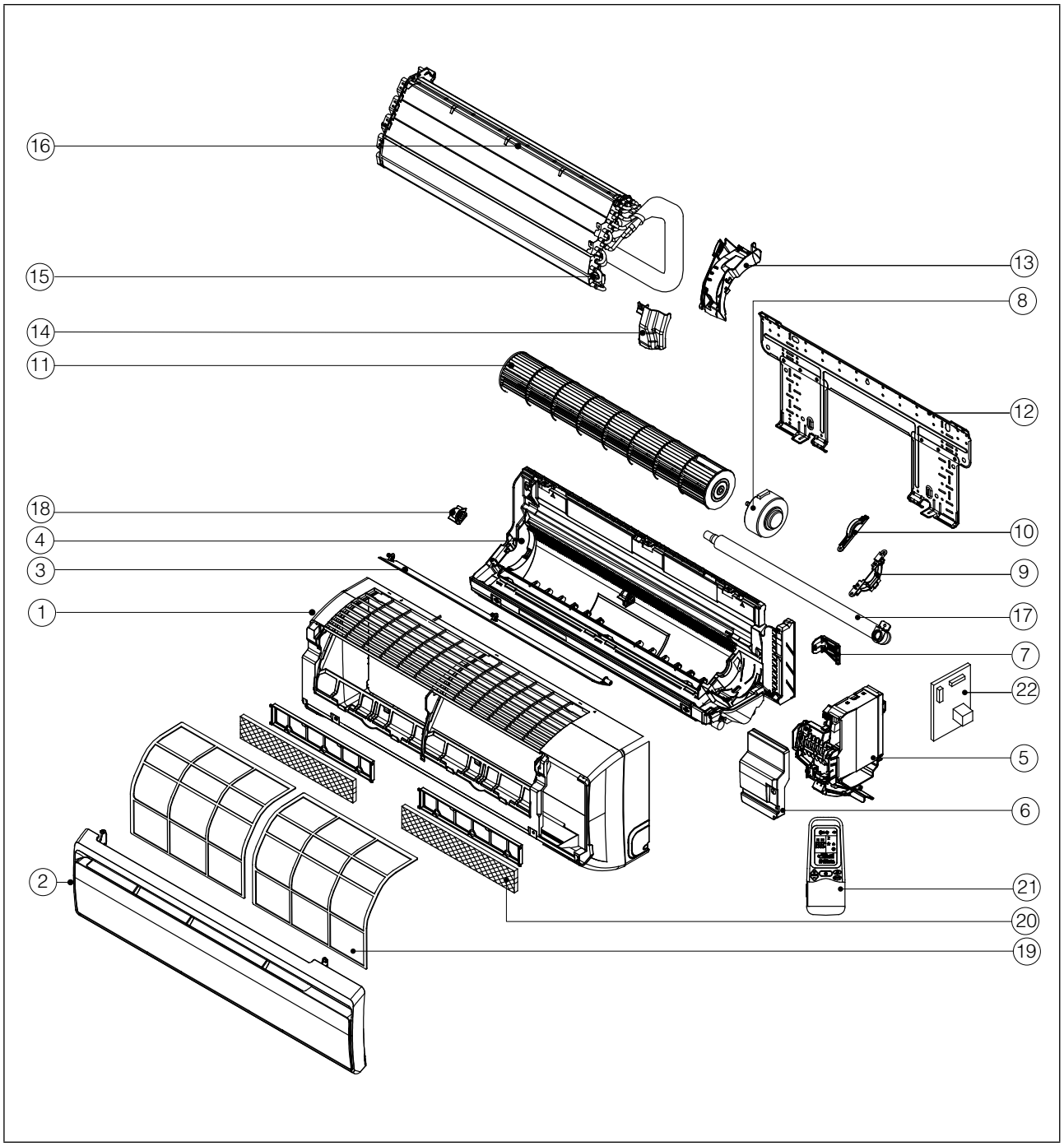
Diagnostic Guidelines

By means of pressure readings:

Data / Circuit	Pressure					Probable cause
	Too low	A little low	Normal	A little high	Too high	
High side **Low side**					• •	1. Overcharged with refrigerant. 2. Non-condensable gases in refrigerant circuit (e.g. air). 3. Obstructed air-intake / discharge. 4. Hot air short circuiting in outdoor unit.
High side **Low side**	•				•	1. Poor compression /no compression (compressor defective) 2. Reversing valve leaking.
High side **Low side**	•	•				1. Undercharged with refrigerant. 2. Refrigerant leakage. 3. Air filter clogged / dirty (indoor unit). 4. Indoor fan locked / seized. 5. Defective defrost control, outdoor coil freeze up (heating). 6. Outdoor fan locked / seized (heating).
High side **Low side**				•	•	1. Outdoor fan blocked (cooling). 2. Outdoor coil dirty (cooling). 3. Indoor fan locked / seized (heating). 4. Indoor air filter clogged / dirty (heating). 5. Non-condensable gases in refrigerant circuit (e.g. air).
High side **Low side**				•	•	1. Air intake temperature of indoor unit too high.

Exploded View & Part List

INDOOR UNIT
MODEL: MWM09/15J/JR, M5WM10/15J/JR



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Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

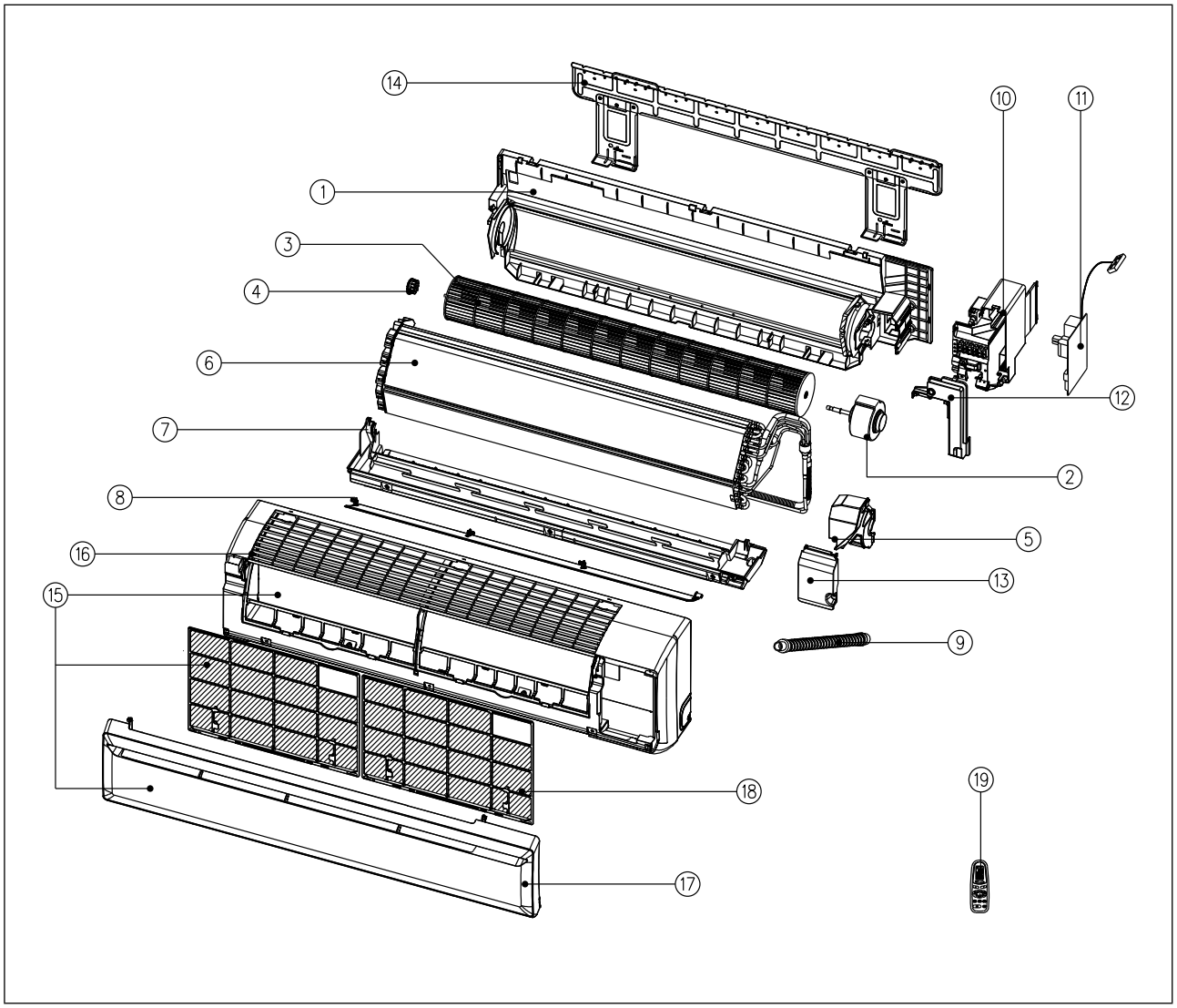
INDOOR UNIT
MODEL: MWM09/15J/JR, M5WM10/15J/JR

No	Description
1	Assy. Front Grille
2	Panel, McQuay
3	Disch. Grille Hor.Blade Assy.
4	Assy. Bottom Frame
5	Assy. Control Box
6	Assy. Service Cover
7	Assy. Piping Fixture
8	Motor
9	Motor Mounting Plate (1)
10	Motor Mounting Plate (2)
11	Blower
12	Assy. Installation Plate

No	Description
13	Right Side Panel
14	Cover, Drip Proof
15	Clip, Coil Sensor
16	Assy. Heat Exchanger
17	Assy. Drain Hose
18	Fan Bearing Vibration Absorber
19	Air Filter
20	Bio Antibody Filter (Pack)
	Titanium Apatite Filter (Pack)
21	Handset, Wireless
22	Control Module

Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

INDOOR UNIT
MODEL: MWM20/25J/JR

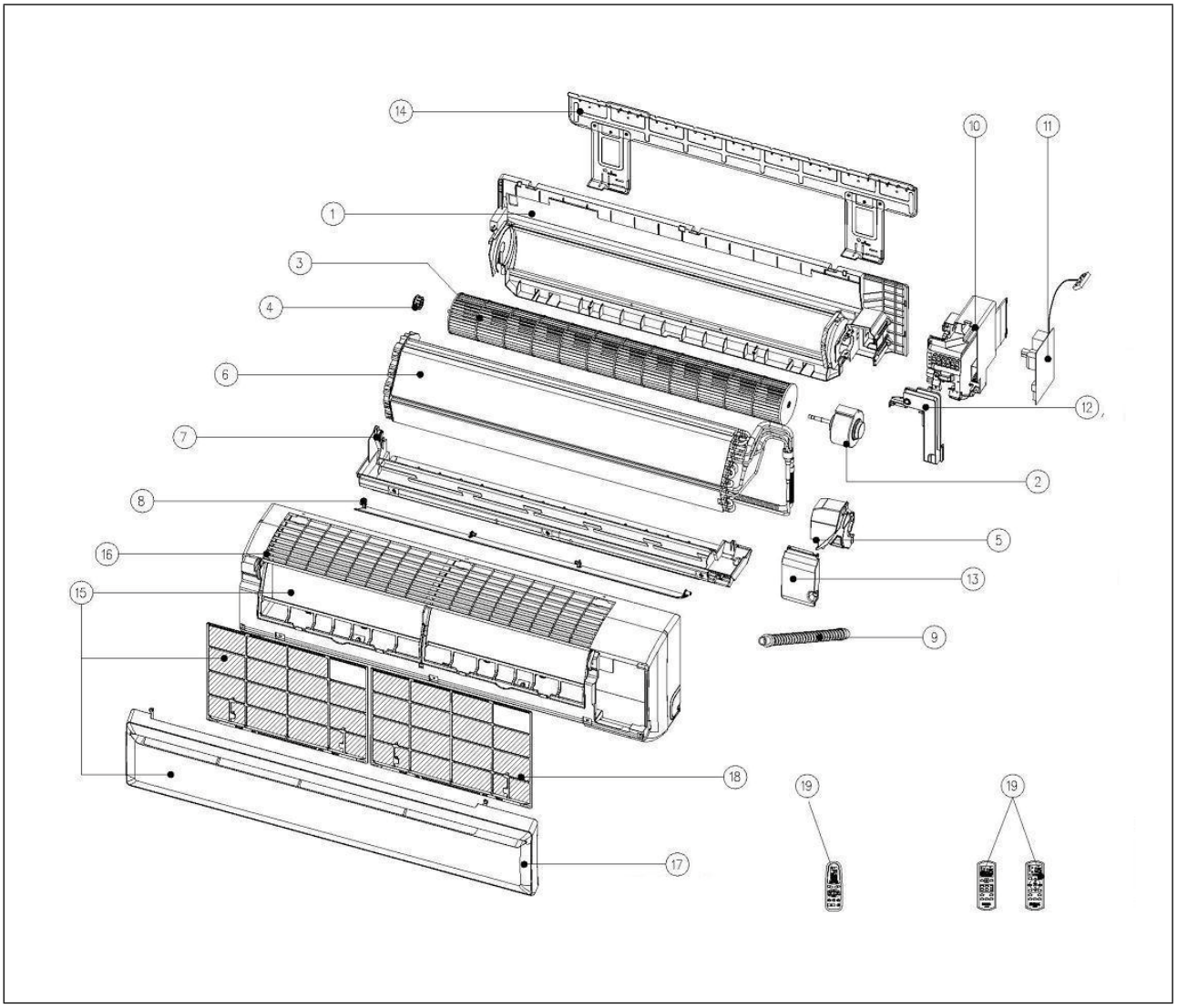


No	Description
1	Assy, Chassis
2	Motor
3	Blower
4	Fan Bush
5	Motor Cover
6	Assy, Indoor Coil
7	Assy, Air Discharge Housing
8	Assy, Louver
9	Hose
10	Assy, Control Box

No	Description
11	Assy, PCB (with Lamp Cover)
12	Control Box Cover
13	Service Cover
14	Assy, Mounting Plate
15	Assy, Front Cover
16	Front Cover
17	Intake Grill
18	Filter
19	Handset Wireless

Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

INDOOR UNIT
MODEL: M5WM20/25J/JR

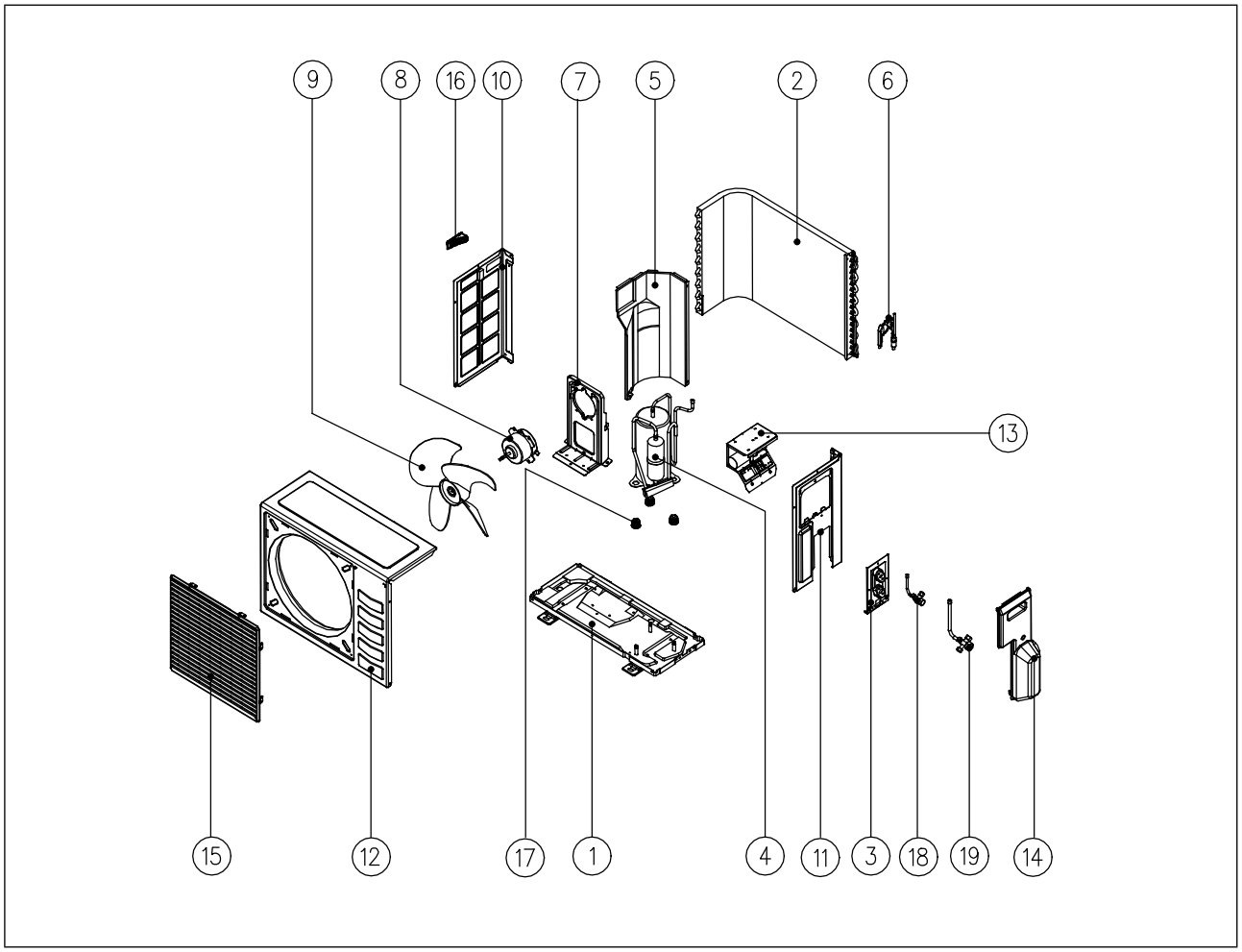


No	Description
1	Assy, Chassis WM20/25J
2	Motor
3	Blower
4	Fan Bush
5	Motor Cover
6	Assy. Indoor Coil
7	Assy. Air Discharge Housing
8	Assy. Louver
9	Hose
10	Assy. Control Box

No	Description
11	Assy. PCB (with Lamp Cover)
12	Control Box Cover
13	Service Cover
14	Assy. Mounting Plate
15	Assy. Front Cover
16	Front Cover
17	Intake Grill
18	Filter
19	Handset Wireless

Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

OUTDOOR UNIT
MODEL: MLC09C



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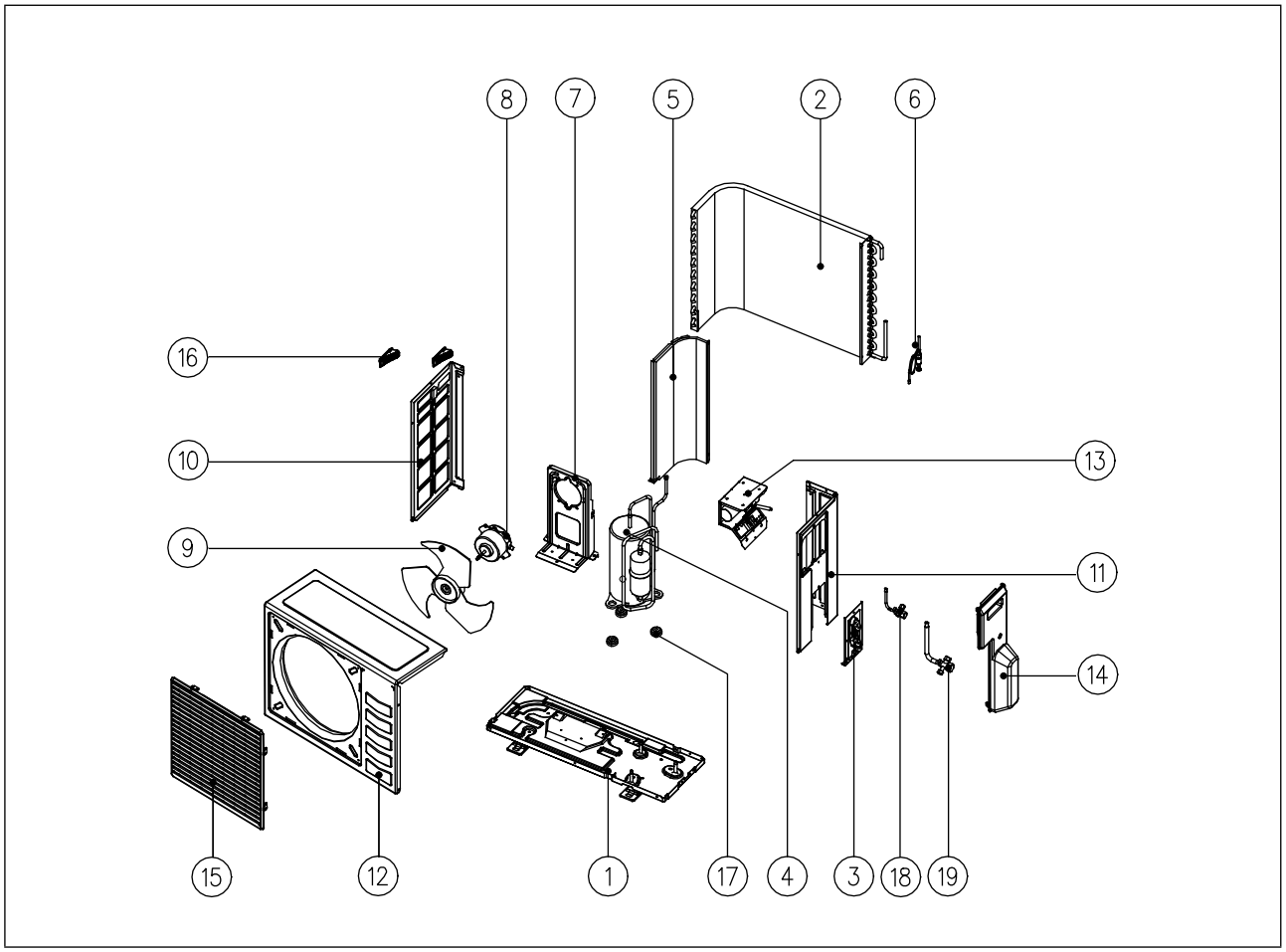
No	Description
1	Assy. Base Pan
2	Assy. Outdoor Coil
3	Valve Bracket
4	Compressor
5	Assy. Partition
6	Assy. Cap Tube
7	Bracket, Fan Motor
8	Fan Motor
9	Fan Blade
10	Left Panel
11	Right Panel
12	Assy. Front Panel

No	Description
13	Assy. Control Panel
14	Assy. Valve Cover
15	Assy. Front Grille
16	Plastic Handle
17	Rubber Grommet
18	Assy. Flare Valve 2 Ways 1/4”
19	Assy. Flare Valve 3 Ways 3/8”
Parts Not in Diagram	
	Capacitor, Fan Motor
	Capacitor, Compressor

Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

OUTDOOR UNIT
MODEL: MLC15C, M5LC10/15CJ



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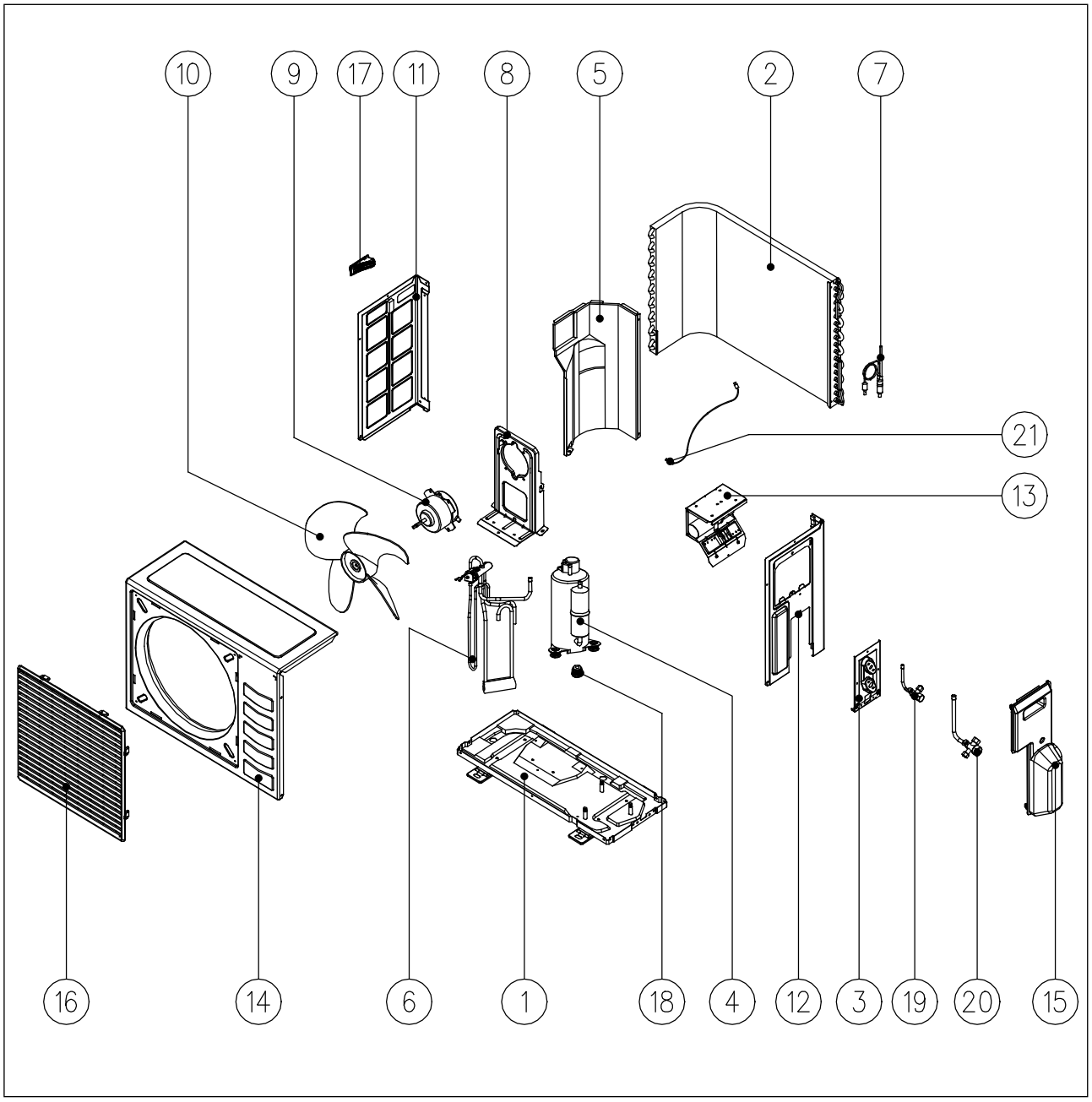
No	Description
1	Assy. Base Pan
2	Assy. Outdoor Coil
3	Valve Bracket
4	Compressor
5	Assy. Partition
6	Assy. Cap Tube
7	Bracket, Fan Motor
8	Fan Motor
9	Fan Blade
10	Left Panel
11	Right Panel
12	Assy. Front Panel

No	Description
13	Assy. Control Panel
14	Assy. Valve Cover
15	Assy. Front Grille
16	Plastic Handle
17	Rubber Grommet
18	Assy. Flare Valve 2 Ways 1/4”
19	Assy. Flare Valve 3 Ways 3/8”
	Assy. Flare Valve 3 Ways 1/2”
Parts Not in Diagram	
	Capacitor, Fan Motor
	Capacitor, Compressor

Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

OUTDOOR UNIT
MODEL: MLC09CR



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Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

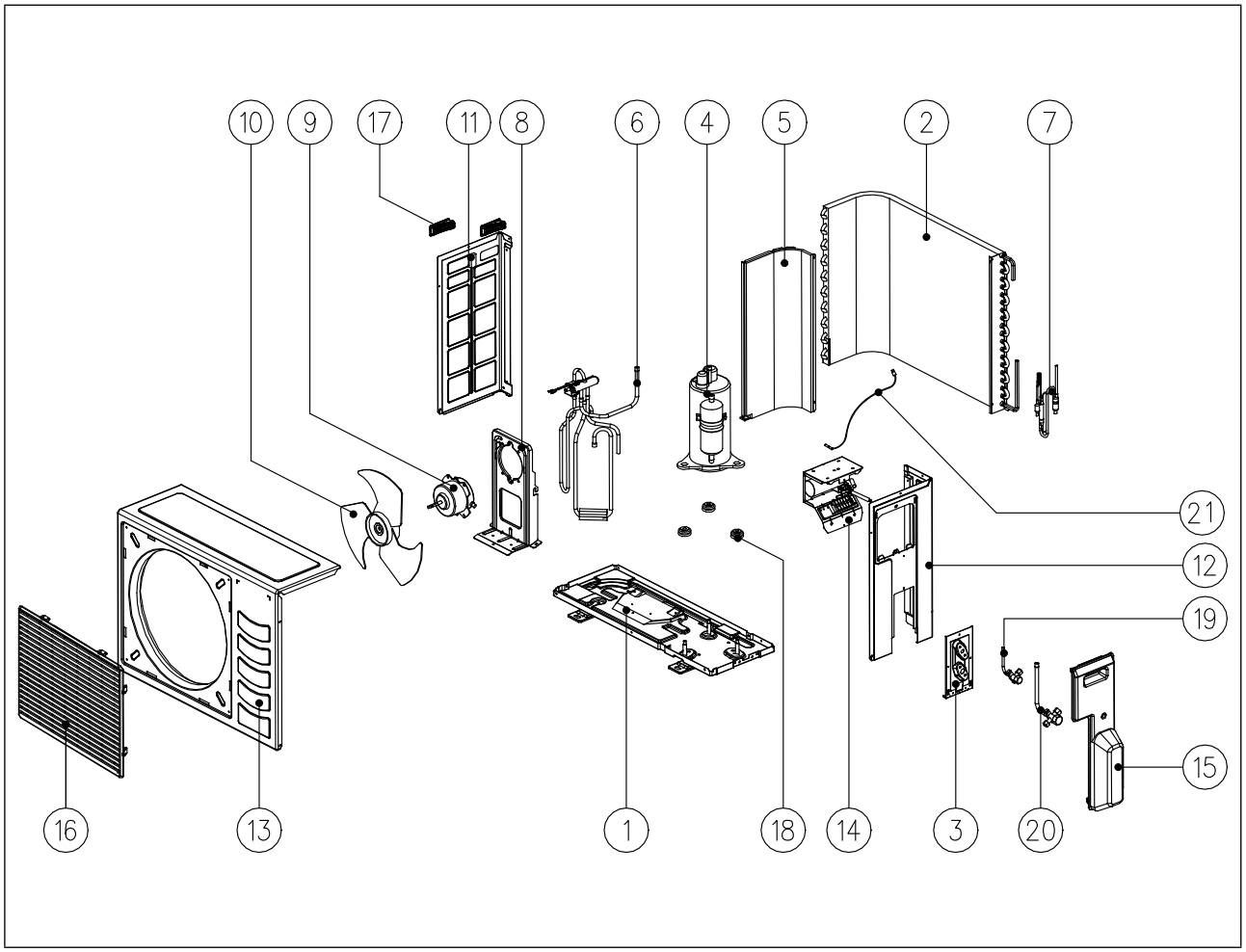
OUTDOOR UNIT
MODEL: MLC09CR

No	Description
1	Assy. Base Pan
2	Assy. Outdoor Coil
3	Valve Bracket
4	Compressor
5	Assy. Partition
6	Assy. 4 Way Valve
7	Assy. Cap Tube
8	Bracket, Fan Motor
9	Fan Motor
10	Fan Blade
11	Left Panel
12	Right Panel
13	Assy. Front Panel

No	Description
14	Assy. Control Panel
15	Assy. Valve Cover
16	Assy. Front Grille
17	Plastic Handle
18	Rubber Grommet
19	Assy. Flare Valve 2 Ways 1/4”
20	Assy. Flare Valve 3 Ways 3/8”
21	Sensor, Outdoor Defrost
Parts Not in Diagram	
	Capacitor, Fan Motor
	Capacitor, Compressor

Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

OUTDOOR UNIT
MODEL: MLC15CR, M5LC10/15CRJ



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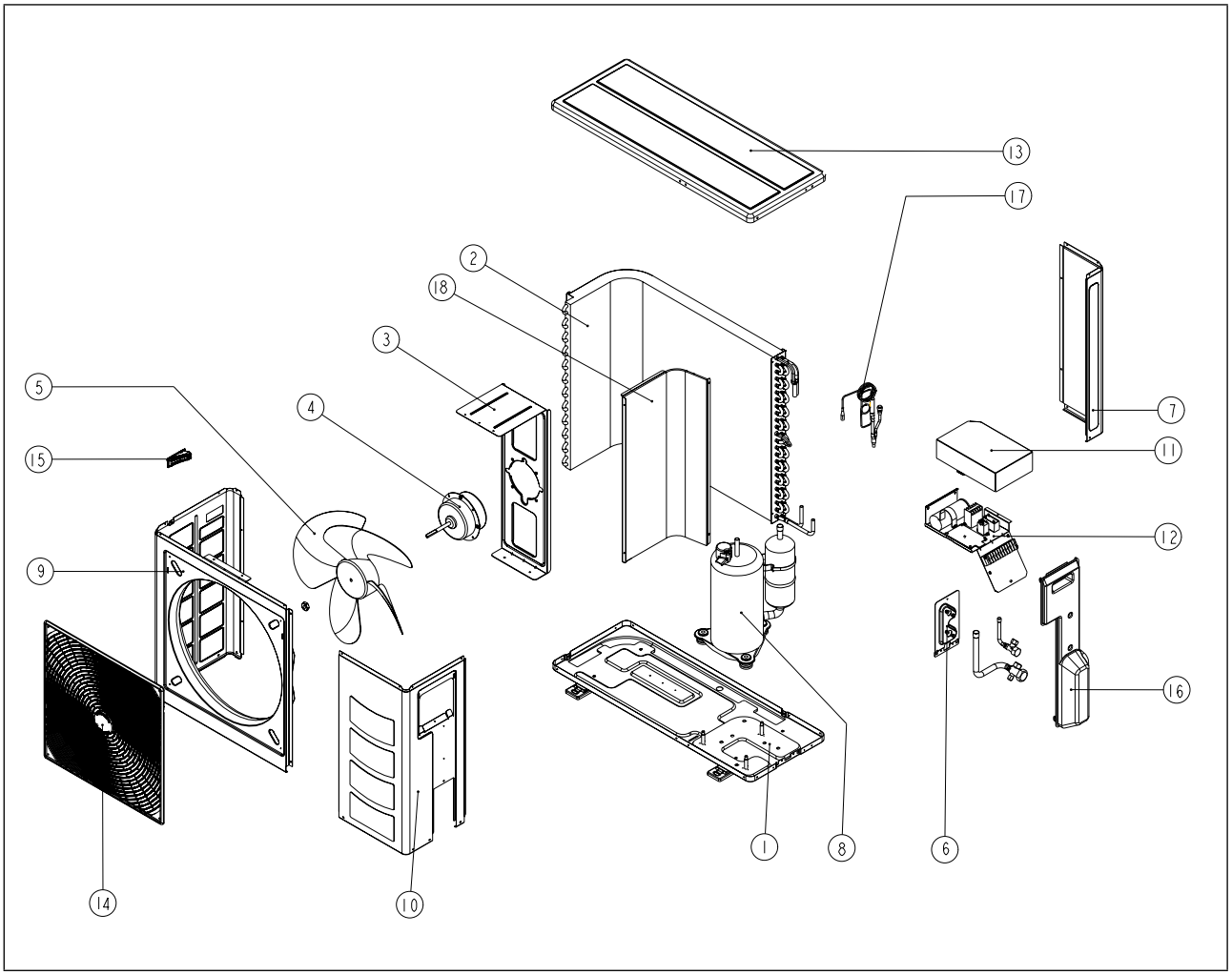
No	Description
1	Assy. Base Pan
2	Assy. Outdoor Coil
3	Valve Bracket
4	Compressor
5	Assy. Partition
6	Assy. 4 Way Valve
7	Assy. Cap Tube
8	Bracket, Fan Motor
9	Fan Motor
10	Fan Blade
11	Left Panel
12	Right Panel
13	Assy. Front Panel

No	Description
14	Assy. Control Panel
15	Assy. Valve Cover
16	Assy. Front Grille
17	Plastic Handle
18	Rubber Grommet
19	Assy. Flare Valve 2 Ways 1/4”
20	Assy. Flare Valve 3 Ways 3/8”
	Assy. Flare Valve 3 Ways 1/2”
21	Sensor, Outdoor Defrost
Parts Not in Diagram	
	Capacitor, Fan Motor
	Capacitor, Compressor

Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

OUTDOOR UNIT
MODEL: MLC20C/CR



Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

OUTDOOR UNIT
MODEL: MLC20C

No	Description
1	Assy. Base Pan
2	Assy. Outdoor Coil
3	Bracket, Fan Motor
4	Fan Motor
5	Fan Propeller
6	Assy. Valve Bracket
7	Back Panel, Right
8	Compressor
9	Front Panel, Left
10	Service Panel
11	Terminal Cover Panel
12	Assy. Control Panel

No	Description
13	Top Panel
14	Assy. Front Grille
15	Plastic Handle
16	Assy. Valve Cover
17	Assy. Cap Tube
18	Partition
Parts Not in Diagram	
	Capacitor, Fan Motor
	Capacitor, Compressor
	Assy. Flare Valve 3 Ways 5/8”
	Assy. Flare Valve 2 Ways 1/4”
	Felt, Compressor

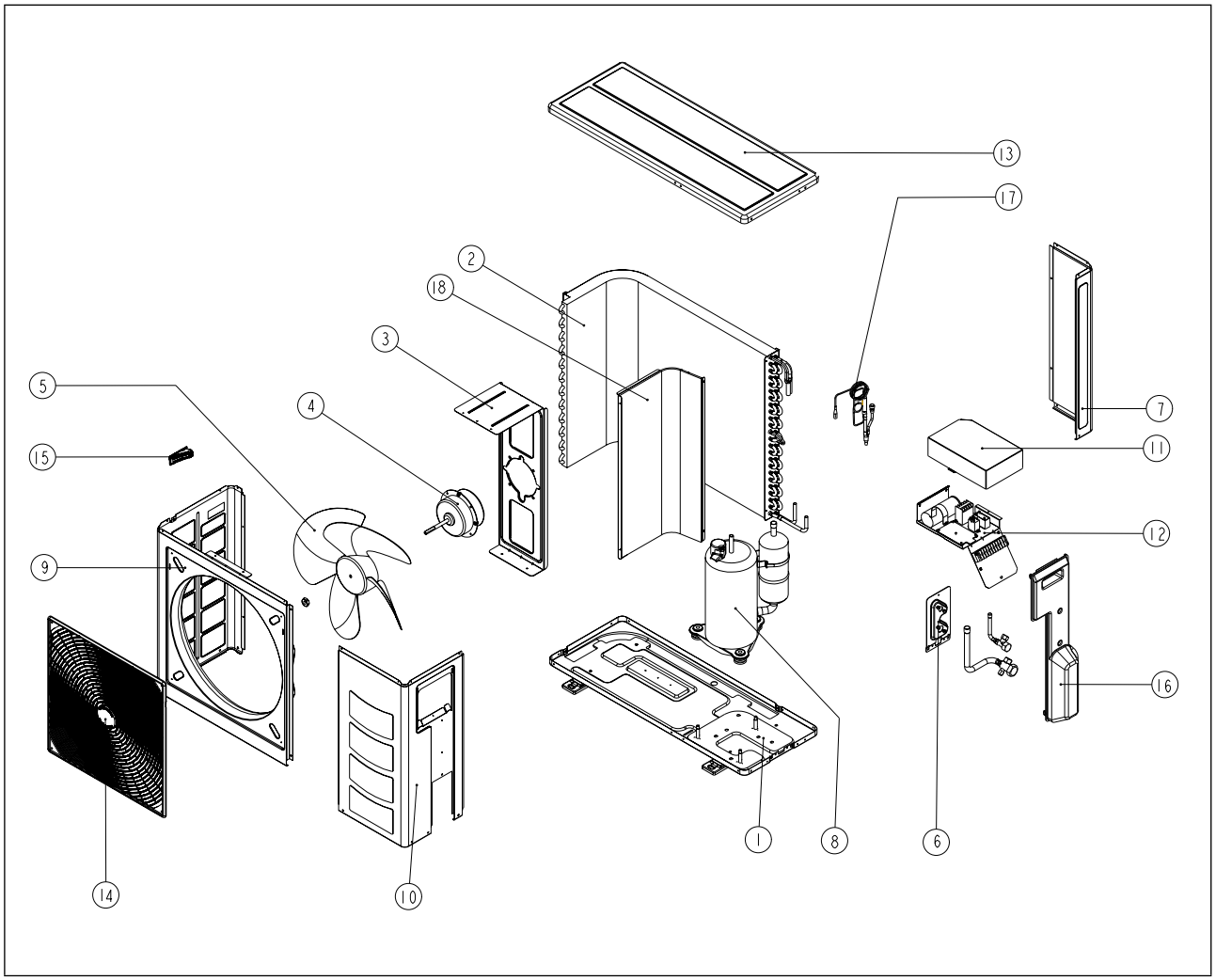
OUTDOOR UNIT
MODEL: MLC20CR

No	Description
1	Assy. Base Pan
2	Assy. Outdoor Coil
3	Bracket, Fan Motor
4	Fan Motor
5	Fan Propeller
6	Assy. Valve Bracket
7	Back Panel, Right
8	Compressor
9	Front Panel, Left
10	Service Panel
11	Terminal Cover Panel
12	Assy. Control Panel
13	Top Panel

No	Description
14	Assy. Front Grille
15	Plastic Handle
16	Assy. Valve Cover
17	Assy. Cap Tube
18	Partition
Parts Not in Diagram	
	Capacitor, Fan Motor
	Capacitor, Compressor
	Assy. Flare Valve 3 Ways 5/8”
	Assy. Flare Valve 2 Ways 1/4”
	Valve, Rev 4 Way
	Felt, Compressor

Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

OUTDOOR UNIT
MODEL: MLC25C/CR



Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

OUTDOOR UNIT
MODEL: MLC25C

No	Description
1	Assy. Base Pan
2	Assy. Outdoor Coil
3	Bracket, Fan Motor
4	Fan Motor
5	Fan Propeller
6	Assy. Valve Bracket
7	Back Panel, Right
8	Compressor
	Assy. Compressor
9	Front Panel, Left
10	Service Panel
11	Terminal Cover Panel
12	Assy. Control Panel

No	Description
13	Top Panel
14	Assy. Front Grille
15	Plastic Handle
16	Assy. Valve Cover
17	Assy. Cap Tube
18	Partition
Parts Not in Diagram	
	Capacitor, Fan Motor
	Capacitor, Compressor
	Assy. Flare Valve 3 Ways 5/8”
	Assy. Flare Valve 3 Ways 3/8”
	Felt, Compressor

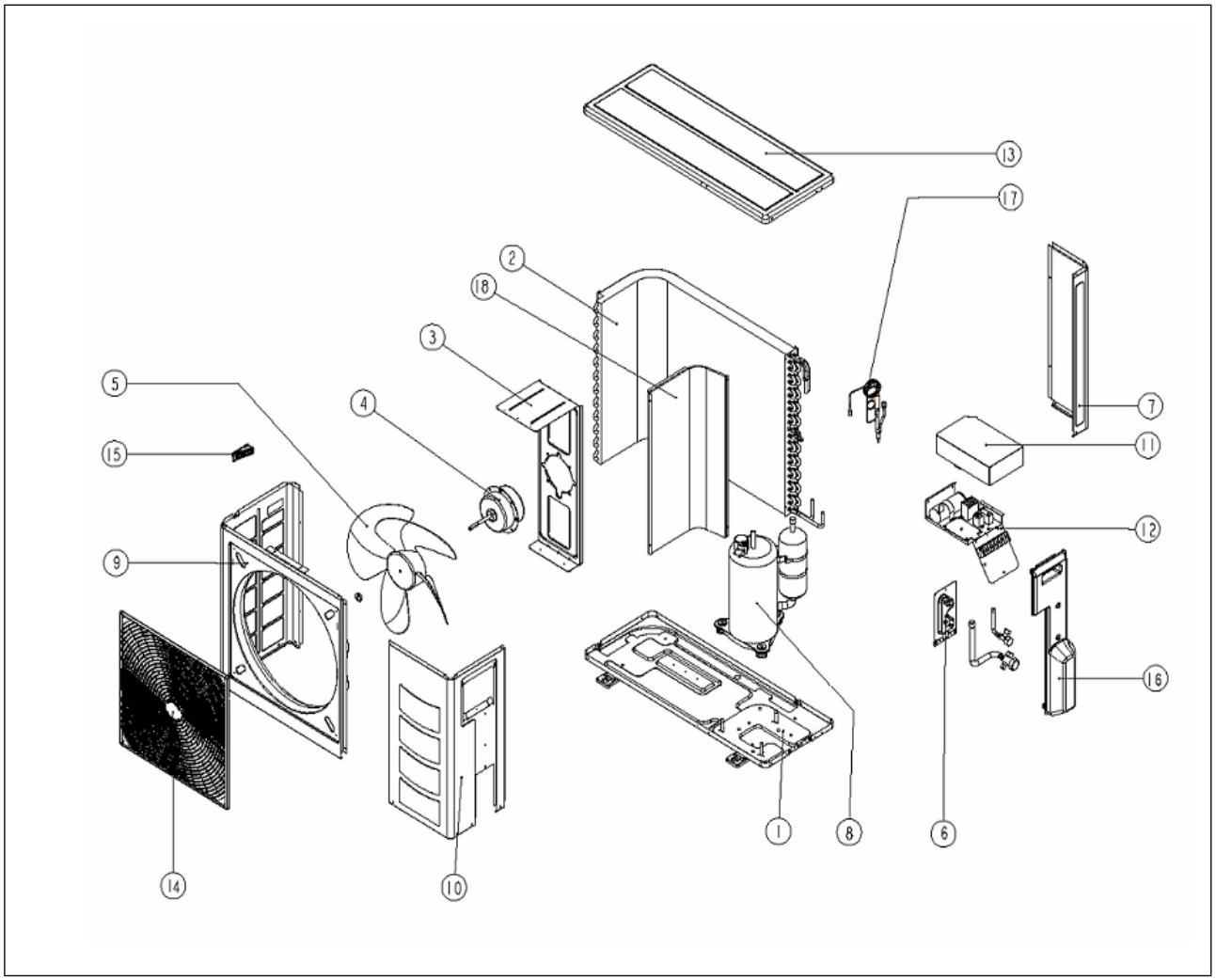
OUTDOOR UNIT
MODEL: MLC25CR

No	Description
1	Assy. Base Pan
2	Assy. Outdoor Coil
3	Bracket, Fan Motor
4	Fan Motor
5	Fan Propeller
6	Assy. Valve Bracket
7	Back Panel, Right
8	Compressor
	Assy. Compressor
9	Front Panel, Left
10	Service Panel
11	Terminal Cover Panel
12	Assy. Control Panel

No	Description
13	Top Panel
14	Assy. Front Grille
15	Plastic Handle
16	Assy. Valve Cover
17	Assy. Cap Tube
18	Partition
Parts Not in Diagram	
	Capacitor, Fan Motor
	Capacitor, Compressor
	Assy. Flare Valve 3 Ways 5/8”
	Assy. Flare Valve 3 Ways 3/8”
	Valve, Rev 4 Way
	Felt, Compressor

Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

OUTDOOR UNIT
MODEL: M5LC20CJ/CRJ



Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

OUTDOOR UNIT
MODEL: M5LC20CJ

No	Description
1	Assy. Base Pan
2	Assy. Outdoor Coil
3	Bracket, Fan Motor
4	Fan Motor
5	Fan Propeller
6	Assy. Valve Bracket
7	Back Panel, Right
8	Compressor
9	Panel Front Left
10	Service Panel
11	Terminal Cover Panel
12	Assy. Control Panel

No	Description
13	Top Panel
14	Assy. Front Grille
15	Plastic Handle
16	Assy. Valve Cover
17	Assy. Cap Tube
18	Partition
Parts Not in Diagram	
	Capacitor, Fan Motor
	Capacitor, Compressor
	Assy. Flare Valve 3 Ways 5/8”
	Assy. Flare Valve 2 Ways 1/4”
	Felt, Compressor

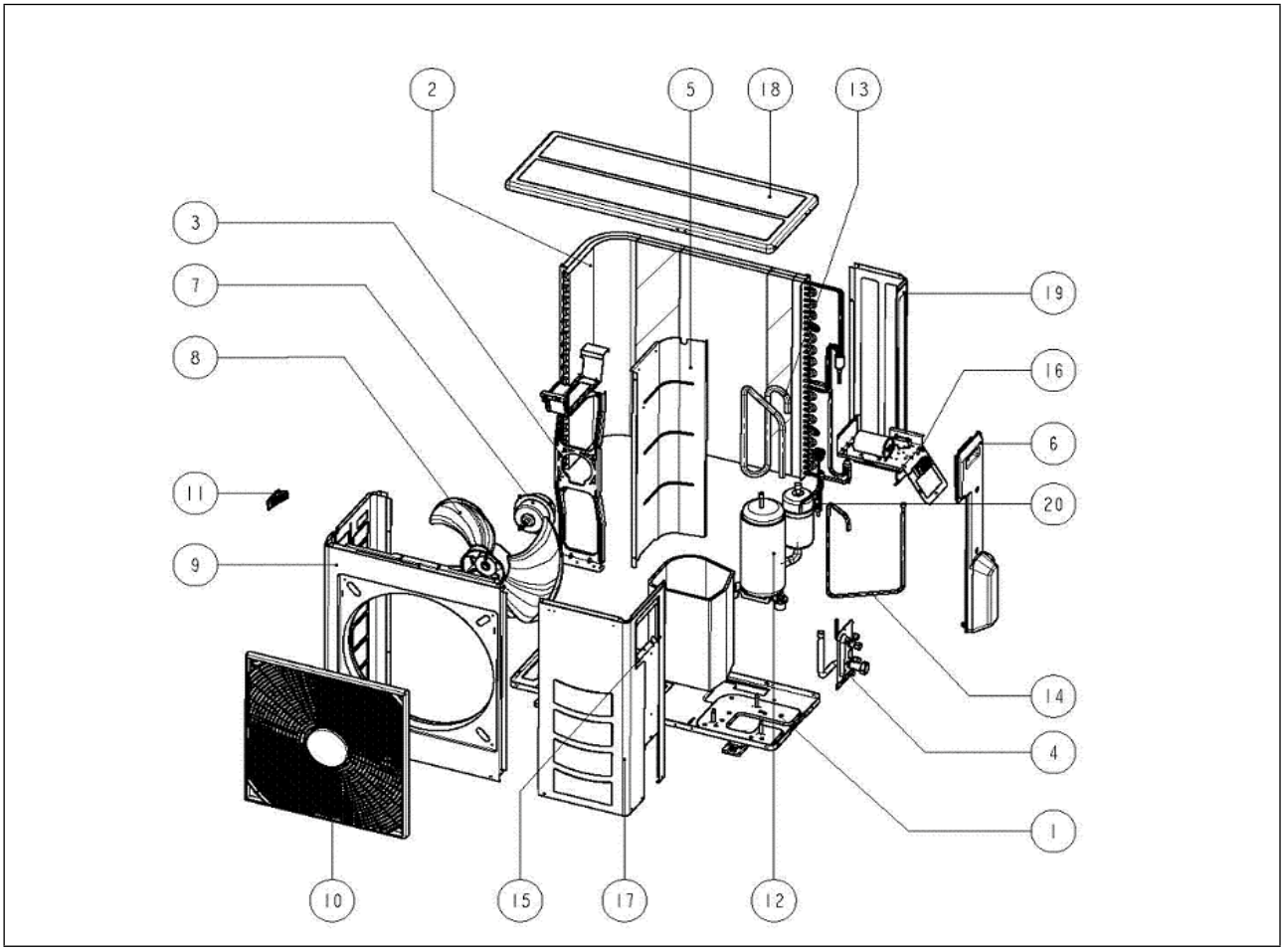
OUTDOOR UNIT
MODEL: M5LC20CRJ

No	Description
1	Assy. Base Pan
2	Assy. Outdoor Coil
3	Bracket, Fan Motor
4	Fan Motor
5	Fan Propeller
6	Assy. Valve Bracket
7	Back Panel, Right
8	Compressor
9	Panel Front Left
10	Service Panel
11	Terminal Cover Panel
12	Assy. Control Panel
13	Top Panel

No	Description
14	Assy. Front Grille
15	Plastic Handle
16	Assy. Valve Cover
17	Assy. Cap Tube
18	Partition
Parts Not in Diagram	
	Capacitor, Fan Motor
	Capacitor, Compressor
	Assy. Flare Valve 3 Ways 5/8”
	Assy. Flare Valve 2 Ways 1/4”
	Valve, Rev 4 Way
	Felt, Compressor

Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

OUTDOOR UNIT
MODEL: M5LC25CJ

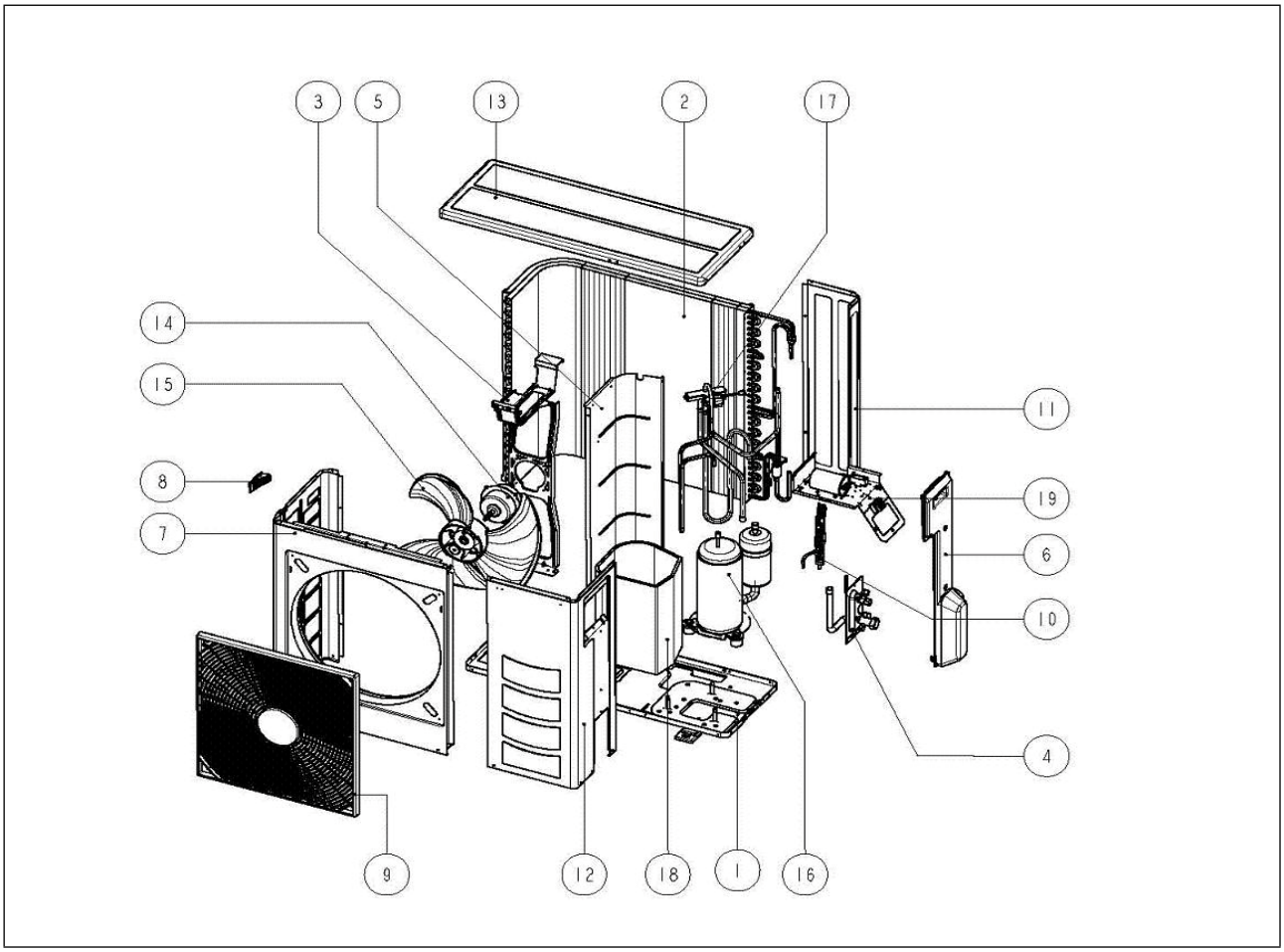


No	Description
1	Assy. Base Pan
2	Assy. Outdoor Coil
3	Bracket, Motor
4	Assy. Valve Bracket
5	Panel, Partition
6	Assy. Valve Cover
7	Motor
8	Fan Propeller
9	Assy. Panel Front Left
10	Plastic Front Grille

No	Description
11	Plastic, Handle
12	Assy. Compressor
13	Suction Tube
14	Discharge Tube
15	Compressor Felt
16	Assy. Control Box
17	Service Panel
18	Assy. Panel Top
19	Panel, Right Back
20	Assy, Capillary Tube

Note: All exploded view and part list are subjected to change by the manufacturer without prior notice

OUTDOOR UNIT
MODEL: M5LC25CRJ



No	Description
1	Assy. Base Pan
2	Assy. Outdoor Coil
3	Bracket, Motor
4	Assy. Valve Bracket
5	Panel, Partition
6	Assy. Valve Cover
7	Assy. Panel Front Left
8	Plastic, Handle
9	Plastic, Front Grille
10	Assy. Cap Tube

No	Description
11	Panel, Right Back
12	Panel, Service
13	Assy. Panel Top
14	Motor
15	Fan Propeller
16	Assy. Compressor
17	Assy. Tubing 4WV
18	Compressor Felt
19	Assy. Control Box

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McQuay International

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Revision History List

Manual : Wall Mounted Split System | **TM : MWM-J_(ii)**

Revision	Subject	Amendment on Manual's Page No.	Date
01	1. Correction on Refrigerant Charge	26	20.10.2011
02	1. Correction on Engineering Data	25, 26	14.12.2011
03	1. Correction on Engineering Data	25	22.2.2012
	2. Revised on Performance Data	33,34,36,38,40,41,42	